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ABSTRACT

Provided in this document are detailed abstracts of studies in the areas of human development, and marriage and family relations. Studies were completed in the Department of Child Development of the Faculty of Home Science, M. S. University of Baroda, India. The first section, on human development, describes studies of physical, motor, and mental development; cognition and moral development; socialization and personality in childhood and adolescence; and assessment measures. The second section, on marriage and family relations, summarizes studies concerning preparation for marriage; adjustment in marriage and family relations; development of a resource materials kit for a course on marriage; childrearing practices and education for mothercraft; and understanding of children and families in the ecological settings of tribes and the urban poor. Appendices list studies abstracted for the volume and publications based on the reported investigations. (RH)

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HUMAN DEVELOPMENT
MARRIAGE AND FAMILY RELATIONS

ED241125

Volume I

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COMPENDIUM OF RESEARCHES—1963-1981
DEPARTMENT OF CHILD DEVELOPMENT
M. S. UNIVERSITY OF BARODA

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In appreciation . . .

How does one acknowledge the contributions of so many to a volume of this nature ? While the responsibility for its limitations undoubtedly rests with the senior editor, the credit rightfully goes to all the partners in this joint undertaking.

Let me begin by expressing my appreciation :

———to the past and present graduate students of the department and their research guides to whose accumulated work of over two decades this volume owes its existence;

———to Professor Amita Verma, Head, Department of Child Development, and Dean, Faculty of Home Science, the guiding (or propelling?!) force behind practically all the researches summarized in this volume. The idea of the compilation was also her brainchild and to her goes the credit of coaxing, cajoling, and facilitating (but never threatening) the work to completion;

———to the Senior Masters students of 1981 goes the credit for laying the foundation of the compendium and building the super-structure, brick by brick, till its plinth level. Each member of the class of '81 abstracted 5 to 10 theses often with enthusiasm and at times with rumbling grumbles, understandable when the third revision was under way.

———to the bright and cheerful young teaching/research assistants Reshma Zaveri, Radha Misra, and Dolly Patel, for gracefully extending their honorary services and coping with the arduous task of tidying up and editing the original manuscript prepared by ten different writers. Particular appreciation is extended to Ms. Reshma Zaveri who spared precious hours from her brief holiday at home from her studies abroad, to work on the Compendium.

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———to Ms. Bhanumathi Sharma (now Lecturer in Lady Irwin College, New Delhi) who during her very brief sojourn in the department at Baroda did the seminal work of organizing a classified list of researches and a brief abstract of the same;

——to the Post-graduate Council of the M. S. University of Baroda for the generous grant which facilitated this publication;

——to all the others but most specially to Mr. M. C. Shah & Shilpa Kapadia who wittingly or unwittingly enabled us to see the work through to completion-typing, proof-reading, sympathizing, enduring……

1982

T. S. SARASWATHI,
M. S. University, Baroda

PREFACE

It gives me immense pleasure to write this preface for this Compendium of research studies in Human Development, Marriage and Family Relationships and Early Childhood Education.

Justification of the need for such a publication of a compilation of research studies in these areas, in our country, is not hard to seek. Published empirical data on the psychological development of the Indian child, the dynamics of family relationships, the processes and practices of early childhood education is so sparce that the oft repeated statement " there is a glaring dearth of research data on the Indian child and family " becomes a wellworn cliche. The few books on the Indian child published by National Institute and University Departments are geared more toward demographic studies and child welfare than theory and research related to child development and family dynamics. On the one hand we complain about our exclusive reliance on Western studies which are irrelevant in our cultural context, on the other hand, access to our own researches is highly restricted, especially since there is no professional journal in child development in our country. I hope that this and other similar attempts to compile and publish existing research studies will serve to meet, at least partially, the need of students and research workers in the field.

While some of the material has already been published in widely circulated journals, most of the research studies unfortunately are neatly bound only to decorate the dusty shelves of a musty library, till a rare reader, painstakingly removes the volume from its shelf to thumb through its yellowed pages.

Since 1960 more than a 100 research studies have been completed in the Department of Child Development of the Faculty of Home Science, M. S. University of Baroda. Some of these have been funded projects through National and International agencies, Ford Foundation, PL 480, U.G.C., ICSSR, NCERT, Planning Commission, Health and Family Planning Ministry, Department of Social Welfare, The Post-graduate Council of the M. S. University of Baroda etc. But a bulk of these studies have been carried out through the masters dissertation work. The research work in the masters program has yielded a rich fund of empirical data due to two major reasons : (a) most of the projects have been planned and executed as group projects (sequential or simultaneous) touching different facets of a centralized theme, hence yielding indepth data and a more comprehensive coverage of a problem. (b) Sixty percent weightage is given to research work in our masters degree program and hence students take it very seriously and invest a great deal of time and effort on their studies. By and large, the recruitment of masters students has been on a selective basis, in our department, resulting in a band of capable and dedicated research workers. A number of the researches carried out as partial fulfilment of the requirements for the M.Sc. degree compare favourably with research work done by professionals in the field. There is a wholehearted committment on the part of the research guides and the students, often going for beyond the normal expections of the requirements for a masters dissertation.

The young and emerging discipline of child development when viewed in a broad perspective is an interdisciplinary field of psychology, sociology, education and cultural anthropology. The field is coming into its own and it is this very interdisciplinary nature of the field that has helped it to emerge as a full fledged discipline in its own right. Today, the field of child development is able to complement the theoretical models and empirical evidence of other social sciences. A meaningful achievement of this objective can be facilitated only if the existing empirical data are culled together in a meaningful and relevant manner. Research to fulfil its aims has to be shared, to be dessiminated, to be questioned and to be viewed not as isolated pieces of evidence but in totality, with other studies and with theoretical knowledge of the field. Any attempt in this direction is not only welcome but is indeed long overdue in our country. That the Department of Child Development, M. S. University of Baroda should initiate such an attempt is only natural. It is to this department that the credit for pioneering work in child development and family research goes ; and during the two decades or so, we have moved a long way from where we began. We have shifted from isolated, piecemeal studies, of a fragmentary nature towards planning and execution of more comprehensive projects studying the various facets of a problem. Another major shift which is obvious has been in the direction of more action oriented or action based researches rather than small scale neatly designed theoretical research studies having limited policy implications. We have been continuously haunted by the question of social relevance of research and feel that as social scientists we have to be accountable to the society which we study and serve. Our increasing involvement in community development programs planned by the Government and voluntary social welfare agencies becomes evident in this compendium. We are no longer satisfied with our role of armchair researchers and are getting out where the actual action is and as we have worked in the field we have learned a great deal, and we have asked ourselves a lot of questions to which we have been seeking answers, answers which hopefully will help in solving some of the problems that besiege the various programs for women, children and families at the community level.

We are tending to move away from varied, scattered topics to more focussed areas of research. The shift is from studies of a descriptive nature eg. child rearing practices, adjustment problems of adolescent girls, etc. to either theory based researches or to those tackling more socially relevant issues eg. education for child rearing, family life education for adolescant girls, malnutrition and mental development etc.

The marathon task of getting together this compendium has been performed by Dr. T. S. Saraswathi, Reader in Child Development and Dr. Veena Mistry, Reader in Early Childhood Education. It has taken them more than two years of painstaking work to abstract and meaningfully put together the various departmental studies. Many of the studies have either been conducted by them on they have been the thesis guides of students who have carried out the work. Their interest and dedication to the task has been boundless and the work has been continued against all kinds of odds. I congratulate them and hope that this compendium will inspire others institutions to come out with their compilations thus creating a central pool of much needed knowledge concerning Indian children and families.

Sept. 1982.

AMITA VERMA
Head Dept. of Child Development
Dean, Faculty of Home Science
M. S. University Baroda

The Child's Appeal

I am the child,
And the world waits for my coming
And the earth watches with interest
to see what I shall become.
Civilization hangs in the balance,
For what I am, the world of tomorrow will be.
I am the child.
You hold in your hand my destiny.
You determine, largely, whether I shall succeed
or fail.
Give me, I pray you, those things that
make for happiness.
Train me, I beg you, that I may be
a blessing to the world.

—Mamie Gene Cole.

* * *

Children are living beings-
more living than grown up people
Who have built their shells of habit
around themselves.
Pure joy is the children's joy.

—Rabindranath Tagore.

* * *

Newborn

Now its done
No longer one
Acute embrace
But face to face
you,
So wrinkled, new
and sleepy, so
uniquely and completely new
Hello !

Antheor Unknown

* * *

If you touch me soft and gentle
If you look at me and smile at me
If you listen to me talk
Sometimes before you talk
I will grow really grow.

Bradley, 9 years.

* * *

I hum gently the sounds of
Childhood and reach home in
the warm beauty of dreams.

Herman Hesse

* * *

Your children are the sons and daughters
of life's longing for itself

Khalil Gibran

* * *

As children we played in gardens with the
tassels of the sun.

George Seferis

* * *

INTRODUCTION

The experience of working on this compendium of researches has been akin to preparing a historical overview for it covers two decades of research in child development conducted by a department which has been the first in the country to offer a program of specialization in child development both at the under-graduate and post-graduate levels of study. More than hundred research studies including departmental research programs, individual faculty research projects as well as doctoral and masters research studies have been conducted in the department of child development, at the M. S. University of Baroda, which even today is one of the few departments in the country offering a doctoral program in the subject.

Dearth of Indian studies

While we as professionals in the field crib about the dearth of data based on Indian children and families, seldom has there been a concerted effort on our part to take stock of what is on hand and make it available to the interested consumer, be they specialists or post-graduate students in Child Development or other related disciplines On the one hand we pay lip service to the importance of "indigenous" literature on the subject, and at the same time permit the very fact to act as a tranquilizing rationalization to explain away our complete reliance on literature from the West, more specifically the United States.

There is, of course, the genuine problem of access to information on research work done within the country. Communication among researchers within the country is hardly commendable; information channels such as central documentation centers or clearing house for literature in the area are inadequate at their best, and sources of information dissemination, such as professional journals, sparce and poorly subscribed to.

Another major problem relates to the fact that Child Development is in its infancy in our country, and a bulk of the researches have been conducted by masters students. While most of the studies have been carried out with great deligence, enthusiasm, and expenditure of time and energy on the part of young researchers willing to put in their best (and in general the field does attract superior female students), once approved by the examiners, the theses are neatly bound, and only serve to decorate (or collect dust on) the library shelves. Some of them do get published in widely circulated professional journals; but most of them suffer the fate of oblivion.

Synopses of research studies

With these concerns in mind, some of us on the staff of child development department at the M. S. University of Baroda, started compiling a series of synopses since 1975. A series of five sets of synopses were prepared between 1975-1981 with the view of sharing the research information with professionals and post graduate students across the country. Even with its limited circulation, the synopses received very positive feedback, and encouraged by the same we set out to present more systematically the research information available with the department.

The present compendium particularly aims at making information available to professionals and post-graduate students in child development, in the hope that present and future research workers can build on the work that has been completed and extend it further rather than repeat the same kind of studies especially in the absence of a clear aim of replication for verification or for pooling information to form a broad data base.

The compendium has been presented in two volumes, each volume encompassing studies in two broad areas. Volume 1 includes studies in Human Development and Family Relations; Volume 2 presents studies in Early Childhood Education and Family & Child Welfare. A sizable number of studies in the two volumes have been either guided by or conducted by the editors of the respective volumes, and this facilitated the division of work. Approximately 85 research studies are included in volume 1 and around 50 in Volume 2.

Some general comments on the contents of Volume 1

Studies presented in Section 1 Human Development, are primarily based on or have been off-shoots of two major departmental projects carried out in the sixties, one on Motor and mental development of Indian babies and the other on Social change and perception of change in child rearing practices in rural Gujarat. Both the projects received generous support in their early stages from the Ford Foundation and Planning Commission, and later from the University Grants Commission and PL 480 Funds as well as Ministry of Social Welfare. Professor Amita Verma was the Director of both the projects and Dr. Pramila Phatak and Dr. Thomas Poffenberger, principal investigators on the two projects. Two major publications that resulted from these projects are " A pictorial monograph of motor and mental development of Indian babies from 1 to 30 months " (1977) by Pramila Phatak, and " Social Change and perception of change in a sub-urban Indian village " (1970) by Amita Verma and Thomas Poffenberger.

The projects on Development of moral judgment and studies in Adolescent socialization received financial support from the Indian Council of Social Science

Research, and the University Grants Commission, respectively, during various stages of their progress. Some of the assessment measures developed in connection with the above mentioned projects are also presented in Section I.

Studies in the area of Marriage and Family Relations, presented in Section II were the outcome of expressed student interest and/or related to questions that came up during the course of study on Marriage offered at the under-graduate level. As with the later studies in Early Childhood Education, and Child & Family Welfare presented in Volume 2, the department's shift toward choice of more socially relevant problems for investigation is obvious in the latter half of Section II in the present volume.

Comments on the design features of the reported studies

1. *Longitudinal studies.* A significant positive feature that characterizes researches, particularly in the area of human development, is the availability of longitudinal data. Besides the initial longitudinal study on motor and mental development of infants that was fortunate in having the backing of resources which such a project involves, a number of offshoots emerged which either utilized the data from the original study or extended data already available over an age span.

2. *Theoretical framework* While a fair number of studies, especially in the areas of cognition, moral development, and child socialization, present a clear theory base, most of the studies reflect an a-theoretical approach. Even though arguments can be extended in favor of both (theoretical and a-theoretical) approaches, a theoretical framework surely serves to (a) give a clear direction for planning and conducting studies, and more important still, (b) integrate data in a meaningful fashion. The choice of the independent variables in particular reflect the weakness of the a-theoretical stand, the choice frequently being stereotypic such as age, social class, intelligence. and so on with an absence of a clear rationale for the choice.

3. *Research design and the use of tests.* Studies presented in Volume 1 eflect a predominant use of surveys using interview schedules/questionnaires or opinionnaires, and/or observation schedules. Experimental studies feature rarely n the first volume in comparison with Volume 2 wherein a number of pre-school ntervention projects have used experimental or quasi-experimental designs. The use of naturalistic observation is note-worthy in some studies.

An examination of the tools and techniques used indicate (a) the tests ave been borrowed primarily from the West (more specifically USA), and have een used either as they are or with some adaptations for Indian subjects. An ttempt to standardize the same for Indian subjects has been made in the case of

Bayley's Scale of Infant Development and Phatak's Draw-a-man Test. In some instances there also occurs the paradox of building a study around a tool (*i.e.* because a tool is available) rather than choosing a tool for a study. In recent years a definite attempt has been made to move away from psychometric tests unless they have been of proven merit for assessment in the Indian situation.

4. *Sample characteristics.* A particularly commendable feature in a number of studies is the inclusion of non-literate subjects especially from the rural areas and the urban poor settings. Nevertheless, a sample of convenience, the literate, institutionalized captive subjects, from among college students and laboratory school children, is seen though less frequently than the former. Here as in other instances there is a clear trend in recent years of moving away from the well trodden path.

5. *Scientific writing.* It has been quite an experience leafing through hundreds of pages of fascinating information not always presented in an equally fascinating manner. Hence even though it does not relate to the design features of the study, a comment on the writing style seems to be pertinent. While hardly one or two research studies had to be discarded because they did not withstand careful scrutiny, it was quite an arduous task to sift the grain from the chaff. Over the years one can clearly discern a definite shift toward more scientific precision not only in terms of the number of pages but also in the presentation style and documentation. Of course, one wonders about the extent to which ideational flow is curtailed by a move toward scientific writing. While caution is in order atleast as far as post-graduate research reporting is concerned there is definitely much wisdom in favour of precision.

Organization of Volume I and some specific comments on the reported studies

As mentioned earlier, Volume I of the Compendium has been organized in two major sections namely, I. Human Development; II. Marriage & Family Relations. A certain degree of overlap could not be avoided in the grouping of studies into the sub-categories.

Studies in Human Development have been classified as related to :

A. Physical, motor, & mental development; B. Cognition and moral development ; C. Socialization and personality in childhood and adolescence ; and D. Some Assessment measures. Section II on Marriage and Family Relations includes researches related to : A. Preparation for marriage, selection of a marriage partner and engagement ; B. Family relationship & marital adjustment ; C. Developing a resource kit for teaching a course on marriage ; D. Child rearing practices and education for mother craft; and E. Understanding children and families in tribal and urban poor settings,

I. HUMAN DEVELOPMENT

Physical, Motor, and Mental Development

As mentioned earlier, studies reported in this section are either based on or have been offshoots of a 10 year longitudinal project on motor and mental development of Indian babies, 0 to 30 months (Dave, 1969 ; Phatak, 1970). The Bayley Scale of Infant Development (BSID) was used for assessment of both motor and mental development. The sample included, urban middle class and urban lower class, as well as rural subjects. Either cross-sectional or longitudinal data are available for a sample of 5884 infants and norms have been suggested. The studies report on the validity and reliability of using BSID for assessing Indian babies.

Phatak (1973) developed a shortened scale for use for diagnostic purposes in identifying neurological cases in infancy and some work has been reported on the feasibility of substituting indigenous materials for the Bayley Items (Khokha, 1974; Maheshwari, 1979).

Examining the anthropometric measurements of 1402 infants, 1 to 15 months of age, and utilizing the regression analysis, Derasari (1974) reports on the influence of the variables sex, social class, and rural-urban residence, as in favor of boys, upper social class, and urban residence.

At least five studies have derived their inspiration from the original data available from the department's longitudinal study of motor and mental development. Kaur (1977) analyzed the longitudinal data of 35 infants from the upper social class and 35 from the lower social class. 0 to 24 months of age, to identify the relationship between stature and mental development. Positive and marginally significant correlations between stature and mental performance have been observed for all months from 16 to 24.

Sharma (1979) traced 51 ten-year old children of the urban poor social class for whom mental performance scores on BSID were available at age 2 years. The mental score at age 10 was obtained using Mahendrika Bhatt's adaptation of WISC for Gujarati children. Sharma reports a general trend of greater the degree of malnutrition during the second year of life, greater the chances of further deterioration by age 10. Performance ability seems to be affected more than verbal ability especially in children suffering from third and fourth degree malnutrition. Boys appear to be more vulnerable than girls.

Three other studies (Sathe, 1980; Kothari, 1981; Bedi, 1981) present data on the positive correlation between nutritional status and mental performance. Cognitive behavior, emotional tone, social orientation, physical response, and energy level were all found to be affected by malnutrition. Malnourished children were characterized as being less exploratory, less attentive, fearful, socially withdrawn, and less active when compared with normal children (Bedi, 1981; Kothari, 1981).

Cognition and Moral Development

Studies in the area of cognition and moral development are very few in number and mainly relate to developmental changes in information processing, particularly memory, and are theory based. Sawhney (1973) tested 60 school going children of age 6 to 14 years to assess the developmental shift from a perceptual to a conceptual mode of information processing. As had been predicted, evidence of shift in the mode of functioning was observed. Younger children needed more redundant information than did older children and were less penalized by irrelevant information. Though an increase in errors with increasing complexity was observed at all ages, there was a decrease in response errors with increasing age.

Developmental changes in short-term memory (STM) coding and retrieval strategies were examined in three studies by Saraswathi, T. S. (1974-76). A longitudinal study of pre-school children from 3 to 5 years indicates a marked increase in STM capacity with increased ability to focus attention and avoid distracting stimuli. Improved memory strategies in older children is also seen in the study examining production and mediation deficiency in children's free-recall (Saraswathi, T. S. 1974). Given the mediators as cues for clustering items and thereby improving efficiency of free recall, children of all age-groups under study, namely, 6 to 12 years, showed an improvement in performance. Younger children, however, needed additional instructions on how to utilize the cues.

Another study by Saraswathi, T. S. (1974) examined the applicability of Bruner's thesis of developmental changes in cognitive mode for understanding memory coding in young children. The subjects were American children (white Caucasians). Children at all age levels including the youngest from KG used verbal coding for not only verbal, but pictorial and motor stimuli as well. Exposure to massive verbal communication through the medium of television is offered as one possible explanation for the marked preference for verbal encoding.

A second series of studies reported in this section relate to development of moral judgment and some of the factors influencing the same. The studies were the outcome of two major research projects directed by Saraswathi, T. S. (1976-1979), and a series of masters dissertations on the same topic. Developmental data available on 100 children (Saxena, 1975) plus 360 children (Saraswathi, Sundaresan, and Saxena, 1977), are generally supportive of the theoretical assumption of sequential and stage wise Progression of moral judgment. A marked shift from stage 2 to stage 3 level of reasoning is observed in the older age group of the 10 to 15 year old subjects. In general, an increasing use of higher stages is observed with increasing age during adolescence. Marked social class differences exist in favor of the upper social class. An examination of the background variables points to the role of greater individualized interaction in nuclear families, in families of small size, and in families where the father/mother have a high level of education and occupation. As hypothesized no sex difference were observed.

A follow-up study (Saraswathi and Sundaresan, 1980) of 55 boys from the original sample of 360 children, indicated a clear shift from stage 2 to stage 3 during the ages 12 to 15 years. Of greater interest, however, is the occurrence of 12 cases of regression in moral judgment scores demonstrating the need for a revision in the theoretical frame of reference, since within Kohlberg's framework (on which the moral judgment studies reported here are based), moral development is invariant, and more important still, irreversible.

Utilizing moral judgment data available from the previous project (Saraswathi, Takkar, and Kaur, 1977-78) attempted to relate maternal disciplinary practices with the development of moral judgment. A general pattern of negative correlations between moral maturity scores (MMS) and power assertion, and positive correlations between MMS and induction have been observed. The correlations, however, were significant only for the upper middle class girls and approached zero for working class boys.

Children of both social class, upper middle and working class indicated a predominant use of power assertion as parental discipline. Mothers were reported as using relatively higher levels of induction with children of both sexes. Fathers seldom used physical punishment for daughters. A high degree of concensus between the data reported by mothers and sons independently was supportive of the reliability and validity of the data obtained.

Socialization and Personality

Studies in this area fall into two major themes : (a) those related to socialization of motives such as aggression, dependency, achievement, and competence in children and relating them to family background and child rearing practices; and (b) those related to adolescent self concept and adjustment problems examined in terms of their relationship to other variables such as anxiety or school achievement, as well as to family background variables.

(a) Childhood Socialization

A number of studies focus on antecedents of aggression (Chokshi, 1963; Ichhapunani, 1966; Vali, 1967; Bharadwaj, 1969).

Ichhapunani (1966) in her experimental study of aggression among preschool children noted that aggressive models increased both total and non-imitative aggression. Boys showed significantly more aggression than girls, a finding substantiated by all the other studies (Chokshi, 1963; Vali, 1967; and Bharadwaj, 1969).

An examination of the child rearing practices indicated that children having low levels of interaction with their mothers, very low or very high demands and restrictions from the mothers, low or high permissiveness for aggression, and having mothers who use highly rigid child rearing practices showed low levels of aggression in the experimental set up. While certain child rearing antecedents seem to inhibit the expression of aggression in an experimental setting, the same variables seem related to heightened expression of aggression in a general pre-school setting (Chokshi, 1963; Bharadwaj, 1969).

In a comparative study of the American and Indian mothers regarding dependency and aggressive behaviors of their pre-school children, Vali (1967) observed Indian mothers to be more punitive toward dependency behavior in their pre-school children. While American mothers used more of verbal reasoning to dissuade their child's dependency behavior, Indian mothers used more of measures such as verbal commands and scolding. Lower class mothers in both cultures exhibited more inconsistent handling of children's dependent behavior showing more punitiveness and more permissiveness than did middle class mothers. Children of the former group exhibited more aggression in the preschool setting. Chokshi (1963) had made a similar observation that both punitiveness and permissiveness for aggression at home were related to aggressive behavior in the preschool setting.

Analysis of interview data from 55 families of rural Gujarat (Bharadwaj, 1969), indicated that physical punishment, love-withdrawal, deprivation of privileges, and threat of destruction heightened the expression of physical aggression, more toward the mother than the father. Boys showed more physical and verbal aggression than girls. Mothers, while indulging dependency behaviors in girls were punitive toward boys showing similar behaviors.

Such a distinction in sex role training is also reported by Parikh (1971) and Mehta (1972) who found that greater pressure is exerted in training of masculinity in boys whereas training of girls, at least in the early years, tends to be more permissive. Perhaps as a reflection of such permissiveness, girls show a more mixed pattern of sex role preference and interests whereas boys tend to be more stereotyped in their sex role preference.

The last group of studies in the area of child socialization focus on socialization for competence (Sharma, 1979 ; Gir, 1979 ; Subramanium, 1980). The self description of school children judged as competent by the teachers indicates their positive self concept, a belief in their own abilities, and a conventional sex typed image Competent children indicate an internal locus of control, accepting credit for their achievements and blame for their failures, especially in the school setting. They exhibit effective coping strategies indicating a mastery over the environment.

A favourable home environment with encouragement and active involvement on the part of both parents in the achievement efforts of the child, a school environment with competent and interested teachers, and with facilities available for all round development, and freedom in teacher student interaction appears to facilitate development of competence in both boy and girls.

(b) Adolescent Socialization

In one of the early studies conducted in the department, Revathi (1963) examined some college girls' (n = 45) attitudes toward parental control. She found that adolescent girls preferred indirect parental control, particularly in areas such as choice of friends, marriage partner, choice of subject for higher education vocational choice, as well as regarding personal appearance. Many girls preferred that their fathers not interfere with their choice of girl friends and mothers not interfere with their choice of subject of study, and with their college work. However, a large majority did not mind direct parental control in the choice of their marriage partner. Surprisingly very few differences would be observed if the study were to be conducted now again in 1982.

Joshi (1964) found that positive attitudes toward self were influenced by warm, affectionate, and democratic parent-child relationship, living in a nuclear family, positive reinforcement particularly from parents, freedom in decision-making, and a positive attitude toward being a girl. In a similar vein Gohain (1971), Kamat (1971) and Varadpande (1971) note a positive relation between academic achievement and achievement motivation and self concept. On the other hand, college girls who indicated negative attitudes toward self (Joshi, 1964) expressed feelings of rejection and inability to get along with parents, did not have much freedom in decision making, and had a negative attitude toward being a girl.

Three other studies (Murti, 1968; Bhatt, 1969; and Baxi, 1969) focus on the relationship between personal and social adjustment problems in adolescent girls and boys and factors related to the same. Their findings indicate that : adolescents from the middle social class show more adjustment problems than those from upper or lower class. A significant positive correlation exists between personal and social adjustment problems. No significant relationships were observed between adjustment problems and variables such as academic performance and age of menarché.

The conducive influence of small families and a number of positive factors that go with the upper social class on the development of a positive self concept are documented by Gohain (1971), Kamat (1971), and Varadpande (1971).

Assessment Measures

Very little work has been done in the department as related to development and standardization of assessment measures. This is not surprising in view of the fact that most of the studies reported here are student researches and the work of standardization involves long term committment to a specific problem and perseverence in the face of the often laborious steps involved in standardization. The high mobility of the staff till recent years has been another factor. Seen as a reflection of these factors is the fact that three of the four assessment measures reported here, namely Draw-a-man test, Abridgement and adaptation of Bayley Scale of Infant Development and Application of Koppitz test of human figure drawings of Indian children are all outcomes of the continued interest and effort of one single researcher namely Dr Pramila Phatak.

II MARRIAGE AND FAMILY RELATIONS

A. Preparation for Marriage

Studies in this section may be grouped under three broad areas, namely, those related to preparation for marriage and marital adjustment, those examining child-rearing practices in rural and urban settings and in different social classes, and lastly those attempting to explain the life of children and families in terms of their ecological context.

The first set of studies on marriage examine the opinions of college students and young couples toward the various aspects of marriage, ranging from selection of a mate, premarital sex, and dowry, to areas of adjustment in marriage. Studies in this area aimed at using the students' opinions as a sounding board to revitalize the course on Marriage offered at the under-graduate level in Home Science.

Obtaining the opinions of youth on the need for preparation for marriage, Virk (1976) reports that preparation for marriage was considered necessary by youth for understanding what was involved in marriage as well as for making better adjustments once married. Youth considered high schools and colleges as the best places for providing education on marriage since most parents are reticent about open discussions with their adolescent children and hence are not suitable sources of information. Premarital counselling was viewed by most as related only to problem solving.

Cherian (1963) studied three Syrian Christian communities in Kerala to ascertain their attitudes toward dowry. Her sample consisted of 48 boys and 42 girls. While nearly 70 percent of the boys reported that they would not accept dowry from their brides, not a single girl in the sample said that they would not accept dowry from their fathers. In fact, compared with their own parents' generation, most of the youth opined that they would receive/give higher dowries. Some 15 years later, Raheja (1978) and Sharma (1978), in their study of Baroda College students and young married couples, respectively, report that a large majority expressed negative feelings toward the dowry system and consider it a social evil.

Opinions of youth regarding sex and sex education formed the topic for Medora's (1975) study. Both college boys and girls between ages 18 to 21 years stressed the importance of sex education in schools. Sex education was viewed as important for clarifying false concepts regarding sex and also for promoting healthy heterosexual adjustment. An earlier study by Mathew (1964) of young married couples had indicated that even though girls did not have much information on sex before marriage that did not affect sexual adjustment in marriage for a large majority (76% of the subjects).

In another study that aimed at obtaining opinions of youth on the selection of a marriage partner, Raheja (1978) found that more boys than girls considered personal or self selection as a preferred way of choosing one's mate. Nearly 60 percent of the girls preferred that the parents make the choice for them. Both boys and girls opine that the consent of the parents is important.

College students (Raheja, 1978), as well as young couples (Sharma, 1978) consider it necessary to get acquainted with the marriage partner before marriage. Family background factors such as SES, educational and professional background, and family harmony (i.e. how integrated the family is) were considered important factors affecting the choice of the marriage partner. A similar view had been expressed by youth in an earlier study by Arora (1976). The subjects had opined that these factors were likely to affect later adjustment in marriage.

In practically all the studies that have obtained data from youth and young married couples, most subjects, especially boys in particular, emphasized the importance of physical appearance in their partners in marriage. The other qualities desired in one's partner by both the sexes include, good health, integrity, intelligence, education, and maturity. That the male partner should be superior in intelligence and education was emphasized by both sexes, but more so by the girls themselves. Arora's (1976) subjects had indicated that male superiority is an important factor in marital adjustment. It is interesting to note that while a majority of college students (Arora, 1976; Raheja, 1978) did not consider caste and religion as important factors in mate selection, young married couples felt that it was an important point for consideration (Sharma, 1978).

Engagement is considered as a prelude and necessary preparation for marriage (Goel, 1977). The engagement period is viewed by youth as providing the opportunity to get acquainted with the future mate and his/her family members, thereby facilitating future adjustment in marriage, or for breaking off the relationship before marriage, if either partner has reservation regarding his/her choice.

No attempt has been made here to summarize the results of the studies related to areas of marital adjustment as these studies suffer from major methodological weaknesses. A difficult area to research on even otherwise, information related to marital adjustment especially in sensitive areas such as money management and sexual compatability are further confounded by the youth and inexperience of masters students collecting the data. Moreover, unlike most of the others studies reported in this section the studies on marital adjustment did not emerge as a clear outcome of a planned design. The findings seem superficial and difficult to comment upon as no clear trend emerges.

Based on the information and feedback available from studies in the area of marriage and family relations, as well as a review of current literature in the field, Khosla (1979) has compiled a kit of resource materials to facilitate the teaching of a course on Marriage offerred at the undergraduate level in Home Science. The resource materials file includes annotated bibliography, information on films and other audio-visual aids available on the subject, as well as a question bank.

B. Child-rearing Practices and Perception of Social Change

A major study reported in this area is based on a departmental research project directed by Amita Verma and Thomas Poffenberger on ' Social change and perception of social change in rural Gujarat with particular reference to child rearing practices ' (Poffenberger and Verma, 1970). Twenty four families in Rajpura, a village near Baroda, were studied in depth through unstructured interviews and naturalistic observations, over a period of two years by a research team of six members well acqainted with the language and people of the community. Since the findings are of particular significance they are described in somewhat great detail here.

1. With regard to *feeding*, there was general agreement that children were breast fed for a shorter period at present (i.e. in 1970) than they used to be in the past two (generations). Supplementary feeding was also said to be introduced earlier and as a consequence earlier initiation of self feeding in children.

Further, it used to be believed in the past that children should not be given solid food till they started walking as it would not do them any good. This idea has changed now.

2. There exists greater permissiveness regarding taking food and water from other castes (lower castes) in the village setting. This finding has been interpreted by the authors as indicating possible freedom in dealing with the environment and also greater independence and self-reliance.

3. Adults commented on the increasing awareness of the association between disease, illness and feces. Hence parents were becoming more strict toward elimination habits and even general cleanliness such as bathing regularly and using soap for bathing.

4. Earlier training in modesty was also commented upon since the parents felt that children knew more about sex earlier and naked exposure was likely to lead to sex play.

5. Children in general were perceived as being less dependent today than in the past, and also more aggressive (than in the past) especially toward their parents. Parents' leniency was attributed as the cause for the latter.

6. Parents especially fathers expressed distress and dissatisfaction over loss of respect for the elders and disobedience by youth particularly those who become educated and find jobs away from the family occupation. Parents were perceived to be more permissive (and less strict) now than they had been in the past.

Other studies in the area of child rearing include three longidudinal studies (Paliwal, 1971; Jawa, 1972; and Gambir, 1972) on shifts in mothers' handling behavior toward children from birth to five years. Focussing on feeding, toilet training, sleeping arrangements and social interactions particularly of the mother--child dyad, the general theme that emerges is : mothers view the child as one of the many responsibilities to be taken care of at home and find it more convenient to do things for the child than to train him in independent handling since that would require more time and close supervision.

Four studies examine social class differences (Arondekar, 1965 ; Desai, 1966 ; and Singh, 1966) and sub-cultural differences (Sethi, 1967) between rural Gujarat and Punjab.

Based on information gleaned from the above studies, Khattar (1974), Pandey (1974), and Bhattacharjee (1975), developed a tool for assessing the knowledge content for efficient mother craft which was later tried out by Devi (1976) on a sample of Nepalese mothers and by Mewar (1977) on a sample of Baroda mothers.

Understanding children and families in their ecological setting

While child rearing practices have been viewed in terms of specific behavior variables in the studies described so far, four studies conducted in the early eighties focus on the environmental context or the ecological setting in which children grow and families function. Conducted in the tribal setting (Dalaya, 1981 ; Hakim, 1981), and the urban poor setting (Kapadia, 1980 ; Misra, 1981), the four studies are of methodological interest Extensive use of naturalistic observation and unstructured interviews point to the kind of data on child development that has been sparce to date. The methods used also emphasize the need to break away from the standard research designs and tools and suggest rich possibilities in the use of anthropological techniques for obtaining relevant information on children and families in their natural setting, on the basis of which intervention programs can be planned more meaningfully. Currently, the two sets of studies are being extended to cover other tribal areas as well as the rural setting in Gujarat.

I. HUMAN DEVELOPMENT

A. Physical, Motor, and Mental Development

B. Cognition and Moral Development

C. Socialization and Personality
(a) Childhood; (b) Adolescence.

D. Some Assessment Measures

A. PHYSICAL, MOTOR, AND MENTAL DEVELOPMENT

Gandhi, B. A Study of Birth weights and Birth lengths of about 3000 Neonates in a Maternity Home in Baroda (1952-'63). 1965.

Satyanadan, M. heights and weights at Birth of a Sample of Children born in Baroda City. 1965.

The child's entry into this world marks the beginning of an independent life for the baby, It is the time when the child is first available for precise measurements. At birth the infant is already a well-developed and highly complex human organism. Factors like period of gestation, type and amount of pre-natal care, socio-economic status, maternal nutrition, weight, prenatal practices, parity, and sex of the child have their significance on birth weight. Social scientists and welfare workers are concerned with the baby's growth at birth since it reveals the conditions with which the baby starts its life

Objectives :

The objectives of study 1 (Gandhi, 1965) were as follows :

1. To determine the relationship between birth weight/birth length of the baby and the sex of the baby, rank order of the babies, income of the parents, and age of the mothers.
2. To study the relationship between birth weight and the gain and loss in birth weight at the time of discharge from maternity home.
3. To study the effect of extra milk and fluid intake on the weight of the babies at the time of discharge from the maternity home.

The objectives of study 2 (Satyanandan, 1965) were as follows :

1. To assess the birth weights and lengths of the new borns.
2. To study some of the maternal factors that affect the baby's size at birth.

Method

Sample :

For study 1 (Gandhi, 1965) a total of 3051 records of neonates from the year 1952-1963 of a local maternity home were studied. These excluded cases of twins.

The sample of study 2 (Satyanandan, 1965) consisted of 542 new borns from low, lower-middle and upper middle class families of Gujaratis, Maharashtrians, and Muslims. New born infants within the first 30 hours after birth were chosen from two maternity homes in Baroda, a Civil Hospital and a private nursing home. Those born with congenital malformation were excluded from the sample.

HS3

Tool :

For study 1 (Gandhi, 1965) the record analysis was used for collecting data.

For study 2 (Satyanandah, 1965) interview method was utilized to gather information on dietary practices. An interview schedule was used with leading questions that were directed to elicit information on mothers' daily dietary intakes as well as any changes which may have been made in the mothers' diet during the course of Pregnancy.

Results

1. The birth weight of the babies ranged from 2.5 to 10.5 pounds and birth length from 14.0 to 24.5 inches (Gandhi, 1965). At 50th percentile, the birth weight and length of the males was 6.04 pounds and 19.5 inches repectively and that of females was 6.0 pounds and 19 inches respectively (Satyanandah, 1965).
2. There were a greater number of male than female babies in the sample.
3. More babies were found to be either first born or second born. As the birth order rank increased, the number of babies decreased.
4. The relationship between the birth weight and birth length of the babies when studied with the rank of the babies revealed that later rank babies seemed heaviest and larger than early rank babies.

Other findings (Gandhi, 1965) :

1. The average birth weight and length was found to be lower in the still borns than that of live borns.
2. Birth weight of babies was found to increase with the increase in age of the mother.
3. At the time of discharge most babies seem to gain weight, though not much difference was found in gain and loss in birth weights of male and female babies. However, babies with lower mean weight have a tendency to show a greater gain in their birth weight at the time of discharge.
4. There is a positive correlation between the birth weight and birth length of the babies.

Derasari, A. J. A Developmental Study of Anthropometric Measurement During the First Fifteen Months of Life. 1974.

In our country, during the first fifteen months of life, making use of standards set up for chronological age invariably present problems as the mothers are never able to correctly tell the age of the infant. In the light of this, an attempt was made in the present study to test the feasibility of setting up standards of values of measurements of chest circumference in terms of the measurement values of head circumference rather than chronological age.

The present study was a part of a departmental project on the study of mental and motor growth of Indian babies conducted by the Department of Child Development, M. S. University of Baroda. The investigator was associated with the project as a Senior Research Fellow from 1966 to 1970.

Objectives :

1. To study five anthropometric measurements namely, weight, crown heel height, head circumference, and chest circumference for the first fifteen months of life in the lower socio-economic groups in Baroda and surrounding villages
2. To determine significant sex differences and urban and rural differences, if any.
3. To study the relationship between stature, stem height, head circumference, chest circumference, and weight during the period under study.
4. To explore the possibility of establishing standards for these measurements by employing regression analysis technique and testing its validity.

Method

Sample :

The sample of the study consisted of 1402 infants of both the sexes between the ages of 1-15 months.

In this study socio-economic class, sex, age and urban-rural residence were kept as independent variables. Stature, stem height, head circumference, chest circumference, and weight were dependent variables.

To determine the socio-economic status of the parents of the infants, Kuppuswami's urban socio-economic scale (1962) was used for Baroda Infants, and Pareek and Trivedi's socio-economic scale rural (1964) was used with minimal adaptation for rural Gujarat infants.

Procedure :

The measurements for the urban infants were recorded in the departmental research laboratory. The same data on rural sample was collected by setting up field laboratories in 27 villages around Baroda city. These villages were situated more than 16 kilometers from Baroda but not more than 30 minutes of travelling time from Baroda. Meeting the medical requirements and being certified by a pediatrician as healthy was one of the necessary criteria of selection of the infant for inclusion and retention in the sample. 'Health' for the purpose of study was defined to include absence of congenital defect, acute illness, chronic illness, and absence of any major illness during the three months prior to the time of recording of the measurements.

The anthropometric measurements for weight, crown heel height, crown rump height, and head circumference were recorded. The procedure and equipment for taking these measurements were specified.

An appropriate form was designed for the purpose of data collection and included information about feeding, major illness, birth order of the infant, size of the family, and birth weight of the infant.

Measurement of the five variables studied :

Weight at the time of the medical examination was taken with the infant wearing a very light single garment. The weight was taken on a beam scale and recorded in kilograms. The scale was balanced before placing the infant on it. The birth weight was recorded as reported by the mother or substitutes.

Height was measured with the help of the 'infantometer' a hollow wooden box with a freely movable foot board. When taking the crown heel length, the infant was placed in the supine position on the infantometer. The assistant held the infant's head in contact with the head board, the investigator stretched the child, straightened the legs, held the knees down, turned the feet and toes upwards and brought the sliding board into contact with the baby's heels and then took the exact measure.

The crown rump measurement was taken similarly except that the infant's legs were raised from the hips and the footboard brought into contact with the seat of the baby.

Head circumference measurement was taken with a flexible tape caliberated in centimeters. The tape was placed on the highest body projection of the occiput and encircled the head above the ears and the forehead.

Chest circumference was measured by a flexible steel tape caliberated in centimeters, which was placed on the infant's chest under the arms at the level of the nipples and was held at right angles to the infant's trunk.

Statistical analysis

In analysing the data under study the statistical measures used were mean and standard deviations, percentile point estimations, and correlation analysis techniques. Means and standard deviations, and percentile point estimation such as 10th, 25th, 50th, 75th, 90th were usually selected for setting up norms, taking into consideration the available data. In the present study means and standard deviations were calculated from both the longitudinal and the cross sectional data for the urban sample and only cross sectional data for the rural sample.

The correlation coefficients of all the anthropometric variables under study were calculated for the entire age group of 1-15 months. Simple regression analysis was carried out for the head and chest circumference to test the efficiency of use of this technique to set up standards.

Multiple regression analysis was carried out for the entire data, separately for the three independent variables namely, socioeconomic class, urban-rural, and male-female to indicate the predictive value of each variable.

Results

1. (a) The means and standard deviations for the five anthropometric measurements of stature, stem height, head circumference, chest circumference, and weight for each month from 1 month to 15 months for the two sexes of the lower socioeconomic classes of urban and rural communities of Baroda may be used as tentative norms.

   (b) The percentile point estimation for the above measurement in conjunction with the means and standard deviations may be used to build tools to help in locating the status of the infant with regard to these anthropometric measurements for the communities in and around Baroda.
2. The anthropometric measurements are influenced by sex, socioeconomic class, and residence of the infants' parents.
3. Lastly it is noted that the regression analysis technique yields more realistic values than the analysis of central tendency.

Besides the above mentioned conclusions this study also yields the following information :

1. The rates of growth for all measured dependent variables show a decrease in velocity as age advances. This decrease is sharpest in the first fifteen months after birth and then becomes gradual.
2. The post natal month in which this decrease is sharpest differs with the sexes and with the anthropometric measurement in question.
3. The wide variation in the mean value of the different anthropometric measurements at different ages in the same group of children is suggestive of the different rates at which these measurements grow in the first fifteen months of life
4. The rate of growth of chest circumference is slower than the rate of growth of head circumference in the first fifteen months of life in these infants.
5. The rates of growth of all the measurements are uneven in as much as there are spurts of growth exhibiting great velocity alternating with periods of rest, of no growth or decreased growth.
6. The belief that birth weight doubles at 5 months and trebles at 12 months is not fully supported by the present study.

Kaur, K. A Developmental Study of the Relationship Between Stature and Mental Development in the Period of Infancy. 1977.

Studies show that there is some positive relationship between physical maturation and mental abilities. The correlation between physical maturation and mental abilities have been investigated and found to be positively significant in all age groups from 6 years onwards. The present study aims at identifying the relationship, if any, between physical and mental development during the infancy period.

Objectives :

The objectives were :

1. To investigate whether there is any correlation between the development of stature and intelligence in the first 24 months of life.
2. To identify social class differences, if any, in the observed correlations

Hypotheses :

The major hypotheses tested were :

1. There will be a significant positive correlation between the development of stature and intelligence during infancy.
2. There will be no difference in the correlations obtained for babies from upper and lower socio-economic classes.
3. The correlation between stature and intelligence will become significant some time during the second year of life.

Method

Sample :

The present study was based on data collected for a major departmental project that measured the mental and motor development of infants on the Nancy Bayley Scales of infant development. The sample of infants covered the age group 1 to 30 months using both the longitudinal and cross-sectional approaches. All the socioeconmic classes in Baroda city and 27 surrounding villages were included in the sample.

The project covered three broad aspects :

1. A longitudinal study of upper class infants of Baroda city during 1962-1969.
2. A cross-sectional study of lower socio-economic class infants of Baroda city and a similar sample from 27 selected villages around Baroda during 1966-1970.
3. A supplementary cross-sectional study of a sample of urban upper class infants and a longitudinal study of urban lower class infants.

The sample for the present study came from the records of the departmental project. It comprised totally of 70 infants—35 infants (18 males and 17 females) from the lower socio-economic class, and another 35 infants (16 males and 19 females) from the upper socio-economic class sample studied longitudinally (1962-69). Only subjects for whom maximum number of test records were available were selected. The present study is confined to the first 24 months of life only.

Tools

1. The Nancy Bayley Scales of Infant Development (mental and motor scales and infant behaviour record) has been used in the main project. The present study used the mental scale which is made up of 163 items arranged in order of increasing complexity of performance with increasing chronological age. It measures the early acquisition of object constancy, memory, learning and problem solving ability, and the early evidence of the ability to form generalizations and classification which is the basis of abstract thinking.
2. The infantometer, a standardized tool measuring the crown heel length of the infant was used to assess stature.
3. B. Kuppuswami socio-economic status scale (urban) 1962 was used to determine social class.

Procedure

Only healthy infants as recommended by the pediatrician were tested on (±) 3 days of their documented birth date. All the testings were done by trained testers in the departmental laboratory. Both the data on height and mental measurements were recorded at the same time.

Plan of Analysis

Since the main objective was to find the relationship between stature and mental score on Nancy Bayley Scale, the product moment (co-efficient of correlation (r) was calculated for each month upto 24 months of life and the same ' r ' tested for its significance level.

Results

Age in Months	Socio-Economic Class	N.	r.	Significance
2	lower	19	0.137	Non-significant
16	lower	21	0.436	Significant at 0.05 level
24	lower	31	0.358	
2	upper	19	0.236	Non-significant
15	upper	30	0.362	Significant at 0.05 level
24	upper	32	0.351	

The results indicate that in the lower socio-economic class, the correlation becomes significant (at 0.05 level) at the age of 16 months and consistently remains so upto the age of 24 months of life. Similarly in the case of upper socio-economic class the same relationship becomes significant (0.05 level) at the age of 15 months, and consistently remains so upto the age of 24 months.

Dave, C. Motor and Mental Performance of Babies Under Longitudinal Study (1-15 Months). 1969.

Pathak, P. Motor and Mental Growth of Indian Babies (1-30 Months) 1970.

Growth is a continuous process and every phase of growth is based upon preceding experiences. Observation of infants provides evidence of a rapid growth in structure as well as function during the first year. Investigations such as Bayley's longitudinal study confirm the generally accepted conclusion that the growth during infancy is extremely rapid and varies in quality from that of older children.

The mental performance during the first year is mainly shown by perceptual motor activities and in the second year through the individual's comprehension of simple questions and problems, his language development, and his responses to other people.

Infant testing leads to an understanding of the unfolding of human potentialities and gives some picture of the normal growth and development in the first two years of life. It helps to know the child's current status of growth and development. By knowing this, proper guidance and optimal environment can be provided to enhance the child's overall personality development. With this in view, a longitudinal study of mental and motor growth of Indian babies from 1 month to 30 months was uadertaken by the Department of Child Development, M. S. University of Baroda.

Objectives :

1. To study how Indian babies grow and develop in motor and mental abilities from 1-30 months.
2. To study the relationship between socio-economic status of the family and the motor and mental performances of babies.
3. To study the relationship between motor and mental development during the age range under study.

Method

Sample

The sample for the present study consisted of 5884 babies out of which 4226 babies were studied longitudinally and 1658 babies were studied cross-sectionally. Irrespective of longitudinal or cross-sectional method of data collection the test records of babies from 1-30 months were classified into one of the following categories based on the socio-economic status of the family : 4141 babies came from upper socio-economic class and 1090 babies came from lower socio-economic class in Baroda city, and 653 babies came from rural areas near Baroda city. In classifying the babies according to the socio-economic status, the socio-economic status scale for urban population (Kuppuswami, 1962) and the socio-economic status scale for rural population. (Pareek, V. and Trivedi G. 1964) were used.

Tools

The major tools used to collect the data were Bayley infant scales of motor and mental development. Besides the two scales, interviews were also taken to collect information regarding the child's family and his life at home.

1. **Bayley Infant Scale of Motor Development (Revised)**

This scale consists of 67 items and is designed to measure the motor abilities from birth upto four years of age. The items in the test cover manifestations of neuro-muscular maturity in the form of body control and co-ordination in movements for pre-walking and post-walking stages including the intermediary period when the child is learning to walk. Items for the earlier period refer to simple bodily movements and grasping and manipulating objects while items in the later period refer to skills of locomotion and handling of objects.

2. **Bayley Infant Scale of Mental Development**

This scale of mental development consists of 163 items. The items in this scale begin from observing the momentary regard shown by the child for certain objects to purposeful manipulation. Thus these items based on the steps of mental development in the babies. Variety of materials such as ring and strings, bell, doll, pellets, etc. are used.

3. **Interview Schedule on Child's Life at Home**

Background information of the child's family was collected and recorded by conducting interviews of the parent when the child came for the first time for testing. Parents were also interviewed at regular intervals to collect information on the child's life at home.

Procedure

The babies were tested as early as they would be available, preferably at one month and then at a regular interval of one month. The period of testing was fixed to be the birth-date of the child ± 3 days. The testing was started with the children of cooperative parents who had registered their babies for admission to Chetan Balwadi, the laboratory nursery school of the Child Development Department. Each child was called by appointment, and was checked by the paediatrician at regular intervals for his/her general health. The child was tested in different positions such as lying on the table, sitting independently, etc. according to his age. As the testing proceeded the points scored were noted down on the Individual Record Sheet. Information about the daily routine and social behaviour of the child was also collected to get a clear understanding about his life at home. Home visits were paid to each subject's house.

Results

The results of the major project and associated studies indicated :

1. The mean scores for motor and mental performances increased constantly from one to fifteen months.

2. The pattern of speed of motor and mental growth as observed in the samples of urban upper socio-economic class is of rising speed upto 6 months. The velocity starts decreasing and seems to become steady during 12 to 16 months.

3. Stable sex differences in mental and motor scores are conspicuously observed in the urban socio-economic group but not in the urban lower socio-economic group and the rural group.

4. The urban-rural dichotomy seems to be more differentiating for girls than boys on both the scales. Girls also seem to be more influenced by socio-economic class than the boys.

5. The urban upper socio-economic group seems to perform better than the other groups on both the motor and mental scales except for the first 6 to 7 months on the motor scales.

6. The influence of socio-economic class appears to be differentiating motor and mental performance in urban babies but not so in rural babies.

7. The findings suggests a positive influence of the urban environment on mental performance of the babies.

8. The validity and the reliability of the Bayley scales as applied to Indian babies are acceptable.

Sharma, R. Malnutrition and Mental Development : A Longitudinal Study. 1979

Sathe, V. Nutritional Status and Mental Performance of Baroda Infants Through the First Year of Life. 1980.

Bedi, N. Effects of Malnutrition on Intellectual and Behavioural Development Through the First Years of Life. 1981.

Kothari, R. Effects of Nutritional Status on Intellectual Functioning and Behavioural Development of Infants. 1981.

The principal problems of children in developing countries are monotonously similar. Usually topping the list is malnutrition, a major contributing factor to morbidity and mortality in children.

Though malnutrition is not always fatal, it nevertheless impairs growth and development, sometimes irreversibly. Half of the world's population suffers from varying degree of undernutrition. Widespread undernutrition in children may in part be responsible for the undernourished state of the adults. Recently the effects of malnutrition on intellectual development has attracted a lot of attention. The crucial problem today is not just undernourished adults but whether malnourishment affects mental development. With this in view, a research project was undertaken to see the developmental process of the relationship between early malnutrition and subsequent intellectual development. The studies reported here (Sharma, 1979: Sathe, 1980; Bedi, 1981; Kothari, 1981) are all part of a major project on malnutrition and mental development.

Objectives

The objectives of the studies were as follows :

1. To assess the nutritional status of the infants and its effects on anthropometric measurements.
2. To assess the mental and motor development of infants tested over a period of six months.
3. To study the level of intellectual and behavioural development and its relationship with nutritional status.
4. To investigate whether there is any relationship between varying levels of nutritional status during the second year of life and intellectual development at age 10 + years in the same children.
5. To see whether change in intellectual status (percentile position) at 10 + years is accompanied by change in nutritional status.
6. To compare the IQ scores of children at age 10 + years on verbal performance, and full scale of WISC separately, and to note which areas of intellectual development appear to be affected by malnourishment
7. To note sex differences, if any, in the above.

Method

Sample

The sample for study 1 (Sharma, 1979) comprised of 51 children (24 boys and 27 girls) who had been measured during 1966-1970 for their mental-motor development (BSID scales) and anthropometric measurements of height and weight, when they were infants. The sample was drawn from the lower socio-economic sections living in the urban slums of Baroda. They were 10 + years of age at the time of the study,

The sample for study 2 (Sathe, 1980) consisted of 15 infants (7 girls and 8 boys). All were normally delivered and were full-term babies. The per capita income per month for the families of these infants ranged from Rs. 18.75 to Rs. 100.

The sample for other two studies (Bedi, 1981; Kothari, 1981) consisted of 16 normal grade I PCM infants who received medical help and nutritional advice, and 20 infants who were not given any medical help or nutritional advice.

Tool

Nancy Bayley's Scales as well WISC adapted and standardized for Gujarati children by Bhatt (1973) were used for assessing intellectual and behavioural development. Anthropometric measurements were taken on standardized equipments employing standardized techniques. Nutritional level was determined on the basis of reference measures recommended by the pediatric council of India.

Procedure

All the subjects were tested under normal favourable conditions, free from tension or restrictions on the part of the subject. The anthropometric measurements were recorded at the time of testing. Before testing it was ensured that the subject had not suffered from any acute illness prior to the time of the testing, and also that the infant was wide awake and not tired, hungry or sleepy.

Results

1. The trend observed is that greater the degree of malnutrition during the second year of life, greater the chances of such a child deteriorating further in his/her intellectual level at age 10+ years (Sharma, 1979).
2. There appears to be more deterioration in performance ability than in verbal ability for children suffering from 3rd and 4th degree malnutrition
3. Boys are more vulnerable to malnutrition than girls (Sharma, 1979).
4. Infants with normal nutritional levels at birth continued to maintain the same level through the first six months of life (Sathe, 1980).
5. On the whole children who changed their nutritional levels were more likely to deteriorate rather than improve, and in the majority of the cases deterioration was by one degree i.e. from accepted normal to 1st grade PCM (Sathe, 1980).
6. Intellectual performance was found to be positively correlated with nutritional status in all the studies. Cognitive behaviour, emotional tone, social orientation, physical response, and energy levels were found to be affected with increasing degrees of malnutrition. Malnourished children were characterized as being less exploratory, less attentive, fearful, socially withdrawn, less active, and had low energy levels as compared to normals (Bedi, 1981; Kothari, 1981).
7. The nutritional status of infants who were given medical help and nutritional advice (minimal environmental support) was maintained during the second half of the first years of life. Infants who did not receive medical help or nutritional advice deteriorated in their nutritional level (Bedi, 1981; Kothari, 1981).

COGNITION AND MORAL DEVELOPMENT

Sawhney, K. A Development Study of the Transition from A Perceptual to A Conceptual Mode of Cognitive Functioning. 1973.

Theorists such as Piaget and Werner have contended that there is a developmental transition in cognitive functioning from a perceptual to a conceptual mode of functioning. The performance of the child at an early age is dependent upon the sensory-perceptual properties of a task. With an increase in age the child acquires internalized, symbolic actions or concrete operations. A shift is now evident from the earlier dependence upon the sensory-perceptual features of a task towards reliance upon more abstract and logical manipulations.

While a number of Piaget's developmental studies have investigated the above phenomenon, Wohlwill (1962) felt that in these works the role of environmental influences tended to be ignored. He suggested a paradigm in which this development is measured in quantitative terms as an intersection between environmental factors (stimulus variables) and organismic factors (age). Three stimilus variables were suggested : (a) *Redundancy*-or the amount of relevant information contained in a task. (b) *Selectivity*-or the amount of irrelevant information that can be tolerated in a task. (c) *Contiguity*-or the spatial proximity of two items within a task.

The present study is based on the research design suggested by Wohlwill (1962). The major objective of the present study was to study the developmental changes in the child's cognitive functioning. The appropriateness of the three stimulus dimensions suggested by Wohlwill, namely, Redundancy, Selectivity and Contiguity in delineating these developmental changes were analyzed.

Objectives

1. To verify the appropriateness of the three dimensions suggested by Wohlwill, namely, Redundancy, Selectivity and Contiguity, in delineating the developmental changes in a child's cognitive functioning.
2. To verify the interaction suggested by researches between these stimulus variables and age, as a determinant of cognitive functioning at different levels.

Method

Sample

A total of 60 subjects, 20 each at the first, fourth, and eighth grade levels participated in the study. Thirty subjects were selected from the Navrachana School, Baroda, and 30 subjects were selected from the Presentation Convent, Srinagar. Age was the only criterion for the selection of the subjects.

The three age groups selected were 6-7 year olds, 8-9 year olds, and 13-14 years olds.

Task

The task included 60 items or 60 sets of geometrical figures (each ' set ' containing three figures). Each items contained two figures which were similar, while the third one was the ' odd ' one. The subjects were to point to the ' odd ' figure.

Each geometrical figure had six properties or attributes namely shape, size, border, sign, number, and shade. Each attribute in turn had three values. For example, the attribute shape had three values, namely, circle, square, triangle ; or the attribute border had the three values, black border, green border, and red border.

When a particular attribute had the same value in two figures of a 'set' and a different value in the third it was claimed to be a criterial attribute. When an attribute had the same value in all the three figures of a ' set ' it was claimed to be quiet, and when it had a different value in all the three figures it was claimed to be a noisy attribute. The amount of redundant and irrelevant information was varied by manipulating the number of criterial, quiet, and noisy attributes as shown in Table 1.

TABLE 1

Scheme for Studying the Role of Redundant and Irrelevant Information

Levels of Complexity		Criterial Attributes	Quiet Attributes	Noisy Attributes	
a	Redundant	5	0	1	
b	Information	3	2	1	
c		1	4	1	Irrelevant
d		1	2	3	Information
e		1	0	5	

As Table 1 indicates there were five levels of complexity. Level ' a ' was the simplest, containing the least irrelevant information and the most redundant information, while level ' e ' was the most complex containing the most irrelevant information and least redundant information. Six ' sets ' or items were presented at each of the five levels of complexity in order that each attribute was criterial once. This accounted for a total of 30 items. These 30 items were presented with contiguity (the two criterial figures being placed together with the ' odd ' figure on one extreme). The same items were then replicated without contiguity (the two criterial figures were separated by the ' odd ' figure, which was placed in the middle). Thus there was a total of 60 items. The total number of items were randomized for order of presentation.

These items were presented to each child individually in two sessions of 30 items each. The child was required to point at the 'odd' figure in each item.

Response Measures

The item choice as well as the time taken to respond was recorded.

Results

1. The findings of the present study suggest a transition from responses based on perceptual judgements to those of a some what more conceptual nature. With an increase in age there was a decrease in the number of response errors. The second major finding was the increase in errors at all age levels as a function of stimulus complexity. No conclusive main effect of contiguity as a stimulus variable was found. Although a significant main effect of the two factors, age and stimulus complexity was evidenced, no meaningful interaction was evidenced between them in determining the response errors, as had been predicted.

2. The results of the present study are found to be supportive of the fact that the young childrern have difficulty in simultaneously handling different attributes. The study also illustrates the increasing capacity, as a function of age, to handle several stimulus attributes simultaneously with a resulting decrease in error scores.

3. The findings of the present study have been viewed within the developmental frameworks suggested by Werner and Piaget. For Kagan (1966) however, attentional involvement is the basic medium in which cognitive activity occurs and the degree of attention has been claimed to govern the accuracy and efficiency of the final cognitive product. Based upon the above claims Kagan suggested a reflective-impulsive dimension which describes the degree to which the child reflects upon the differential validity of alternative classifications of stimulus or solution hypothesis in situations in which many response possibilities are made available simultaneously. The adjective 'reflective' is most descriptive of the child who has long response times and few errors, the reverse being the case of the 'impulsive' child. While individual differences at each age level have been found between reflective and impulsive children, Kagan has also claimed that development results in more reflective responses, as compared to earlier impulsive ones.

4. The findings of the present study were consistent with the above views. An increasing tendency towards reflective responses as a function of age, was evident in both the Baroda and Srinagar samples. This resulted in increased response latencies with a corresponding decrease in error scores as a function of age. While the responses of the older children in the Srinagar sample were more reflective than the responses of the youngest children, the most complex items (B4 and B5) tended to be far too difficult for them and led to a decline in

response latencies. For the older children in the Baroda sample, on the contrary, increase in item complexity led to a corresponding increase in response latencies, which is characteristic of reflective response.

Saraswathi, T. S. Changes In Immediate Memory Span: A Longitudinal Study of Children From 3 tc 5 Years. 1976.

Theorizing and experimenting on memory processes has become a major interest and activity in psychology. However, much of the research has been conducted with college students as subjects. The primary aim of the present investigation was to study the developmental changes in the immediate memory-span of pre-school children between ages 3 to 5 years. The data presented in this study comes from a longitudinal project on pre-school testing conducted by the Department of Child Development, M. S. University of Baroda, Gujarat

Method

Sample

A total of 52 Ss were tested under the pre-school testing programme Of these complete longitudinal records on memory items (for the period under study i.e. 3 to 5 years) were available for 15 children (6 girls and 9 boys). The data on 36 subjects (15 girls and 21 boys) has been treated cross-sectionally for purposes of comparison.

Procedure

The children were tested individually at six monthly intervals from ages 3 to 5 years. For securing data on immediate memory the following instructions were given to the child : " I shall speak out some numbers. You listen carefully and then repeat ". If the child started repeating the numbers before the trial was through, he was told " Wait until I finish. You should speak only after I finish speaking ". After making sure that the child followed the instructions E started two number-series and continued with a series of increasing length until the child could no longer respond. The maximum number of digits presented were five. There were three trials for the numbers series of each length- 2, 3, 4 and 5. Different digits were presented at each trial.

Scoring

For each number-series S was given a score of " 1 ", if he responded correctly in at least one of the three trials, and " O ", if he failed in all the three trials.

Results and Discussion

1. The analysis of the longitudinal data indicates an increase in memory capacity during 3 to 5 years. None of the other differences between means at

successive age levels is significant. A similor trend can be seen in the cross-sectional data also.

2. This finding suggests three major possibilities : (a) an increase in short-term memory capacity, (b) change with age in the ability to avoid distracting stimuli and focus attention, and (c) change in the strategies of coding and retrieval.

The normative data of this kind are especially important for planning tasks of comparable difficulty in developmental studies using children of widely varying age groups.

Saraswathi, T. S. Production And Mediation Deficiency In Children's Free-Recall. 1974.

While it is quite possible that increase in free-recall in childhood is due to changes in memory capacity, age differences in memory performance can also result from different strategies for storage and retrieval. Flavell, Beach and Chinsky (1966) proposed that there are actually two distinctive hypotheses related to this issue : (a) 'The mediation deficiency' hypothesis which suggests that the young child spontaneously produces the potential verbal mediators at the appropriate point in the task, but these verbalizations for one reason or another fail to have their expected, mediational effects ; (b) The 'production deficiency' hypothesis which predicts that the young child tends not to produce the relevant words which can be used as mediators. Provided that the child can and does produce these words in some situations, his deficiency in this particular task is that he fails to emit them.

The present study explored further the nature of production and mediation deficiency in young children under conditions of maximum facilitation for organization. The stimuli were presented as pictures and labled by E. Items were presented in category blocks and the number of categories (four) were well within the memory span of young children. Instructions to experimental groups encouraged recall in terms of categories. Under these conditions, older Ss should receive decreasing benefit from the stimulus organization because they tend to spontaneously categorize items (Bousefield, Esterson and Whitmarsh, 1958). Hence an interaction between grade level and instructional conditions should be observed if young Ss show no mediation deficiency.

Method

Sample

Twenty-one children from each of the three grades served as Ss. All the children were enrolled in David Edwards Elementary School, Ames, Iowa. The Ss were predominantly upper middle class white children. Two of the initially selected kindergarten Ss and one S from grade 3 had to be replaced because of

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failure to follow instructions. At each grade level, Ss were assigned randomly to one control and two experimental groups. There were seven subjects at each grade level in each of three groups (four girls and three boys from grade KG, 3 and 6). With the exception of the three children who were added later, all Ss had participated in an earlier study on memory conducted by the same E.

Materials

Twenty-four black on white drawings of common items belonging to four conceptual categories were used as materials for the recall task. The items were similar to those used by Moely, Olson, Halwes and Flavell (1969). There were six items in each of four categories, namely, animals, furniture, clothing, and vehicles.

Procedure :

Each *S* was tested individually in a room allotted by the school for testing purposes. The items were blocked according to categories for presentation, which the order of the categories and the order of the items within the categories randomized for each trial. The pictures were presented one at a time at an approximately 3 sec. rate. To avoid differences in labeling, *E* named the pictures as they were presented. There were four trials, with items presentation followed by a 3 min. period of free recall for the first three trials. The fourth trial consisted of cued recall with no item presentations. The *E* called out each of the category names in a random order and asked *S* to recall the items in each specified category. For the sorting task which followed the fourth recall, *E* placed the 24 pictures in a random order (the only restriction for randomization being that no two pictures of the same category were adjacent to each other) on the table in front of *S* and asked *S* to sort them into groups of pictures that go together.

The procedure for three different conditions, namely, one control and two experimental conditions, differed only in the mediational instructions given by *E*.

Analysis

The number of items correctly recalled by each S on each trial, excluding repetitions and instructions were analyzed by means of a 3 × 3 × 4 analysis of variance (conditions, grade level, and trials). The same type of analysis was also conducted on the number of categories and number of words recalled per category. An initial analysis revealed no sex differences, hence sex was not included in this and subsequent analysis.

Category clustering scores were computed by applying Bousefield and Bousefield's (1966) measures of clustering. In this measure, the difference between the obtained and expected (O-E) number of sequential category repetitions is used as an index of clustering; the larger this difference, the greater the clustering or organization in recall. The clustering score was computed for each *S* on the first three trials. The fourth trial was omitted because clustering was induced by *E* giving the category for recall. The clustering scores were analysed in a 3 × 3 × 3 (Grades, Conditions, Trials) analysis of variance.

The sorting task performance was evaluated by counting the number of categories the *Ss* used in sorting the pictures.

Results and Discussion

The effect of the mediational instructions used in this study was clearly limited to the improvement in category clustering for all three grade levels. Moreover, mediational instructions increased clustering only for the Mediation group for whom a feed-back regarding their attempt at category organization in recall was given before Trial 2.

The observed deficit in the younger children's item recall and category organization suggest the possibility of both production and mediation deficiency. Evidence for production deficiency comes from both within age group and between age group comparisons. Significant differences in category clustering were observed among all the grade levels studied. The deficiency in young children's category clustering was observed both in the overall comparison and the control group's performance alone. The performance of the control group especially shows that young children fail to spontaneously use category clustering as mediators in free-recall. Additional evidence for production deficiency comes from the finding that when instructed to do so even Grade KG-*Ss* were able to use category organization.

Finally, it was interesting to note that while a majority of the sixth graders took approximately only 30 seconds for recall, calling out the items at a very fast rate, the younger children recalled the items more slowly taking approximately 2 – 2½ minutes before they decided that they could not recall any more items.

Saraswathi T. S. On representation in short-term memory :
A Developmental Study. 1974.

The overall aim of the present investigation was to study the developmental changes in short-term memory. This includes : (a) investigations of the effect of three different modes of presentation of stimuli (motor, visual, and verbal) on the short-term memory (STM) of children at three age levels (KG, Class III, and Class VI) ; (b) investigations of the effect of three types of interference tasks (motor, visual, and verbal) on each of the three modes of presentation for the three age groups ; and (c) investigations of interactions, if any, between mode of presentation and interference tasks and the age of the subjects.

Theory and available empirical evidence suggests that there may be developmental differences in the facilitative effects of modality on STM performance. Available information also indicates that there may be developmental differences in the effect of different types of interpolated tasks on the STM of children. Finally, it is hypothesized that there will probably be a significant increase in STM capacity with increasing age, as revealed in memory performance.

Method

Study 1

Sample

Fifty four Ss participated in this study, 18 from each of three grades—KG, Class III, and Class VI. All the children were enrolled in David Edwards Elementary School, Ames, Iowa, U.S.A. With the exception of one Mexican boy who was fluent in English all the *Ss* were white Caucasian. There were equal number of boys and girls at each grade level. Three boys and three girls at each grade level were randomly assigned to one of the three experimental groups. Three of the initially selected *Ss* from grade KG had to be replaced by three others because of lack of sustained attention.

Design

With three modes of stimulus presentation (verbal, visual, and motor) and three types of interpolated activities (verbal, visual, and motor), there were nine treatment combinations. For practical reasons it was decided to limit the number of experimental sessions per child to three. Since the within-subjects interactions were of particular interest in this study, a partially balanced incomplete block design was used, resulting in three experimental groups at each age level.

Stimulus Materials

In order to make the stimulus materials for the verbal and visual modes of presentation clearly distinct, abstract words and abstrac-line drawings were used in Study 1.

Procedure

Each subject was tested individually in three experimental sessions. Each session consisted of two practice and 20 experimental trials of a specified mode. The trials with and without interpolated activity were randomized in order of presentation. Each serial position was tested four times every session.

The general procedure for all three modes of presentation was kept as similar as possible. Five blank cards were placed in a row in front of *S* for the verbal and motor conditions, so that *Ss* response always consisted of pointing to the card in the correct position. Order of presentation was from *Ss* left to right,

Scoring

Every correct first and second choice response was given a score of '2' and '1' respectively.

Study 2

Sample

Twelve children, two boys and two girls from each of the three grade levels (KG, Class III, and Class VI) participated in Study 2. Of the twelve, six children (one boy and one girl from each age group) had participated in Study 1 and were chosen on the basis of high performance and motivation (Group 1). The other six children participated only in Study 2 (Group 2). All *Ss* were enrolled at David Edwards Elementary School, Ames, Iowa. With the exception of one boy from Hawaii who was fluent in English, all *Ss* were White Caucasians.

Design

A complete within *Ss* design was used. Each child was tested on all the 3 × 3, Modality × Interference combinations. For Group 1 *Ss* who had participated in Study 1 and for whom data was available on three treatment combinations, data on the remaining treatments was collected in four additional sessions. For Group 2, data was collected in six sessions, one per day.

Procedure

The stimulus materials used and the procedure were identical to those used in Study 1.

Results and Discussion

1. *Age Differences in Memory Performance*: There was a significant increase in memory performance with increasing age in both studies. While the design of the present investigation does not permit analyses of whether the observed age differences are due to differences in memory storage capacity or due to differences in strategies used for acquistion and retrieval, the latter possibility cannot be overlooked.

2. *Sex Differences in Memory Performance:* No significant sex difference in memory performance was observed in either Study 1 or Study 2. Nor did sex interact significantly with the other independent variables namely, Age, Mode, and Interference.

3. *Interference Effects:* The overall significance of interference effects was observed in both Study 1 and 2. Thus, interpolated activity between presentation and recall significantly lowered memory performance.

4 *Presentation Mode Effects:* The main mode effect and the interaction of Mode with Age failed to reach statistical significance in both Study 1 and Study 2. It is not possible to determine whether the results obtained in the

present investigation are due to representational abilities of *Ss*, or the differences in the stimulus properties present in the different modes, or due to some other yet unidentified factor.

Concluding Comments

The findings of the present study, most specifically the absence of a Mode × Age interaction raises doubts regarding the applicability of Bruner's thesis regarding developmental changes in the preferred mode of presentation to the age span studied here (5 to 12 years). With the ever increasing bombardment of verbal stimuli through the media of television (for American children) and the increasing accessibility to the printed material in books, the shift to verbal encoding of stimuli is likely to occur earlier now than ever before. A study similar to the present one using *Ss* from 2 to 8 years of age may provide developmental information that could not be obtained in the present study.

Saraswathi, T. S. A short-term Longitudinal Study of the Development of Colour and Form Concepts in Pre-School Children 1974

But for the tendency of human beings to interact with the world in terms of concepts, life would indeed be very chaotic. As Elkind (1967) points out, it would be overwhelmingly impossible to deal separately and individually with every stimulus that impinges upon our senses. To Cite Siegel (1964), " For us, as adults, diversity is neither distressing nor chaotic, for we have created order out of the seeming disorder (p. 209) ".

The same cannot be said of children. Concept learning and attainment take place through a very complex and slow process, and are joint products of maturation and learning. The acquisition of concepts would be among the most important developmental tasks of childhood.

Early concepts are relatively simple. They usually represent concrete objects and simple experiences. Two concepts, colour and form that appear to be acquired early in the child's life and that continue to play an important role in his adaptation to the environment, are studied longitudinally in the present investigation.

Method

Sample

A total of 52 subjects were tested under the pre-school testing programme of the Department of Child Development, M. S. University of Baroda. Of these, complete longitudinal records were available for 18 children on the concept of colour and for 13 children on the concept of form. The rest of the data has been treated cross-sectionally with varying numbers in each age group, and used as supplementing the longitudinal evidence.

Tools

1. *Colour Identification* Six colour cards, red, green, yellow, blue, black and, white were used for colour identification. The colour pink was also included in the original test. It has been excluded from the present analysis as the investigator was interested only in the child's ability to identify the primary colours.

2. *Form identification* Ten forms, cross, triangle, semicircle, circle, rectangle, hexagon, diamond, star, oblong, and square, were used in the Goddard Form Board.

Procedure

The children were tested individually at six-monthly intervals during the age period 3 to 5 years. The procedure adopted for identification of colours was as follows : The colour cards were presented to the child one at a time and the child was asked "What colour is this ? After presenting all the cards, if the child was unable to name one or more colours correctly, the following procedure was adopted. All the cards were placed in a row in front of the child. The child was then told, for example, "Show me the red card ". The same procedure was followed for identifying all the colours. If the child was unable to identify any of the colours, then a colour matching task was introduced. The colour cards were again placed in a row on the table. The child was then shown a card identical in colour to one of the colour cards on the table. The child was asked, "Is there a card of this colour in front of you ? Give me the card of this colour." A similar procedure was followed for matching all the six colours.

The procedure for identification of forms was as follows : The Goddard Form Board was placed on the table in front of the child. The form blocks were placed in three piles at the child's right hand (at the left, if he was left handed). Care was taken to see that the blocks in the piles were not kept in the same row as their recess on the board. The child was asked to "put the blocks where they belong." For their practice trials *E* unobtrusively replaced in its pile the block which the child placed incorrectly on the board. There were two trials, one practice and one test trial.

Scoring

1. *Colour Identification* : A score of "2" was given for successfully naming or identifying each colour, a score of "1" for successfully matching each colour, and "O" for failure in all three.

2. *Form Identification* : The scores for form identification were based on *E*'s rating of the *S*'s responses. A score of "2" was given for immediate recognition of each form, a score of "1" for recognition with difficulty of each form and "O" for failure to recognise.

Results and Discussion

1. *Colour Identification*: The colours red, white and black appear to be discriminated, identified, and labeled at an earlier age than the colours blue, green, and yellow. The identification of the last three colours is not accurate even at age 5. Ability to match all the colours is evident even at the youngest age level studied here, namely, 3 years. Children apparently discriminate colours earlier than they are able to identify them and identify colours earlier than they are able to spontaneously label them.

An analysis of the cross-sectional data indicate trends similar to those observed in the analysis of the longitudinal data.

2. *Form Identification.* Children's ability to recognize forms appears to develop very early. The lower scores obtained by children at age 3 when compared to their performance at age 5 is more an indication of the time taken to respond rather than failure to respond correctly. Failure to recognize occurred very rarely in three year old children and not at all in children from 3½ to 5 years of age. The analysis of the cross-sectional data indicate trends very similar to the analysis of the longitudinal data.

Saxena, K. Development of Moral Judgement of Children Between Ages 8-12 Years. 1975.

Saraswathi, T. S.; Sundaresan, J.; Saxena, K. Age. Sex, and Social Class Differences in the Development of Moral Judgement of Indian Children Between Ages 10-15 Years. 1977.

Morality has been generally defined as conscience, as a set of rules of social action which have been internalized by the individual. Moral development has been conceived of as the increase in such internalization of basic cultural rules (Kohlberg, 1964, p. 384).

To the social scientist in general, and to the child development specialist in particular, the issue of morality as a major aspect of socialization is of sustaining interest. As Ausubel and Sullivan (1970) aptly point out, moral obligation is an " important instrument for cultural survival since it constitutes a most efficient watchdog within each individual serving to keep his own moral values and the values of the society in which he lives (p. 469) ".

The three important aspects of morality are behavioural, affective, and judgemental. The social learning approach focuses on the behavioural aspect and the psychoanalytic focuses on the affective aspect while the cognitive developmental emphasizes the judgemental aspect of morality.

The cognitive developmental approach to the study of moral development was used as the theoretical framework in the present studies.

Objectives

1. To assess age, sex, and social class differences in the development of moral judgement.

Secondary objectives of Study 1 (Saxena, 1975) were :

1. To understand the role played by stage mixture in determining the age changes.
2. To study the consistencies in responses to various moral issues.

The major hypotheses tested were :

1. With increasing age there will be a decreasing use of lower level moral reasoning and an increasing use of higher level moral reasoning.
2. Increased stage mixture will be observed more during a period of developmental transition than during a comparatively stable period.

The secondary objectives of Study 2 were :

1. To obtain cross cultural evidence regarding the invariance of the sequence of stage-wise progression in moral judgement.
2. To test for social class and sex differences in moral judgement.
3. To identify some of the specific family background factors related to development of moral judgement.
4. To obtain evidence regarding the generality specificity dimension of moral judgement.

The major hypotheses tested were :

1. The data regarding moral judgement in Indian children between ages 10-15 years would be supportive of the universality of sequential stage-wise progression.
2. Social class differences will be revealed and these may be partly a reflection of family background characteristics such as education and occupation of the parents and the type of discipline used.
3. There will be no sex differences in general, but differences may be observed in the lower social class where there are more marked differences in socialization of boys and girls.

Method

Sample

The sample for Study 1 consisted of 100 subjects, all boys, 20 each at ages 8, 9, 10, 11 and 12 years. Ninety eight of the boys were selected from Rosary School, Baroda. The other two were from the Convent of Jesus and Mary. Both are English medium schools catering primarily to children from middle and upper social classes. Age and sex were the main criteria for selection. For each age, children whose birth dates fell within ± 3 months from January 1st were selected. To maintain homogeneity of the sample, children who were either termed by the teachers as backward in school work or whose family income was less than Rs. 300/- per month were not included.

The sample for Study 2 consisted of 360 children, equal number of boys and girls of two social classes (upper and lower) ; 120 from each of the three age groups 10-11, 12-13, and 14-15 years. The upper socio economic group consisted essentially of fathers who had college degrees, a professional or semi-professional job and earned above Rs. 1000/- per month. The lower social class consisted essentially of fathers who had no college degrees, were employed in skilled or unskilled jobs, and had a monthly income below Rs. 1000/-.

Tool

A pilot study was undertaken in Study 1 (a) to try out the administration of Kohlberg's Moral Judgement Test (1973) on Indian children, (b) to familiarize investigators with the interview technique; (c) to acquire material for practice in scoring procedure.

On the basis of this pilot study on 10 boys of ages 9-12 years wherein interviews were conducted using the KMJ test, the following modifications were introduced.

1. Giving Indian names to characters in the stories and changing some story situations to make them more realistic in our culture.
2. Simplification of the language.
3. Simplification of the questions.

A modified version of KMJ test was used for data collection. KMJ test consists two forms, Form A and B, each containing three stories which pose a hypothetical moral dilemma. In each dilemma acts of obedience to law and rules or commands and authority conflict with the needs or welfare of other persons. Each story is followed by a set of questions and probes, and the subject is asked to resolve the dilemma and give reasons for his choice. Each story in the test deals with two different moral issues, such as life, punishment, contract, property rights and so on.

Study 2 : A pilot study was conducted on a group of 20 children from 10-15 years of age from the IPCL English Medium School. The purpose was (a) to equate Forms A and B of the adapted test so that they could be used as alternate forms; and (b) to establish reliability in scoring (the inter scorer reliability on the scoring of 20 protocols was .88).

The tool used for Study 2 was Form A of the adapted version of the KMJ Test. It deals with the moral issues of life, punishment, father-son relationship, promise-contract, and property trust. It consists of three stories, each posing a moral dilemma followed by a series of questions probing into the child's moral reasoning.

Procedure

The clinical interviewing technique was used for data collection. The children were contacted directly at their homes and the two to three sessions that were needed to complete the interviews were conducted at the subject's homes in Study 1. In Study 2 the children were interviewed in the school premises in one or two sessions lasting from 40-45 minutes each. Background information was obtained from parents in Study 1 and the school in Study 2.

Each subject was interviewed individually, as far as possible, in a separate room to ensure that the responses were not affected by the presence of other persons. All the interviews were tape recorded, and later transcribed verbatim. Each subject wae given a code number, which was specified on each transcription sheet for correct identification.

Scoring Procedure

To determine an individual child's moral judgement level, his responses were scored on the basis of the instructions given in Kohlberg's Scoring Manual (1973). The unit of analysis is each point or idea elaborated by the subject in discussing the responses to the questions based on the story.

After completing scoring of all the issues separately, a total score per child was calculated. Total scores revealed whether a subject's reasoning was purely at a single stage or a mixture of two (and in some cases three) stages. The basic criterion for this decision was a 75%-25% split. Stages that represented less than 25% were treated as non-existent. If no stage accounted for 76% or more of the total then the stage with the largest percentage was treated as the subject's modal or major stage, other stages being minor.

The final scoring sheet of each subject in Studies 1 and 2 included :

1. A *modal stage* obtained from the subject's profile of percentages of each stage specific score.

2. A *variation score* — which denoted the stage mixture in the child's reasoning and was computed for each subject by multiplying the percentage of his responses on a stage by the number of stage (s) separating that stage from the modal stage, and then summing up these products (Turiel, 1969).

3. *Weighted issue scores* were calculated for each subject by first multiplying the number of points at each stage by the number of the stage, then by summing these products and dividing the sum by the total number of points (Turiel, 1966).

4. ***Moral Maturity Scores :*** These are the sum of the weighted percentages of the various stage points, calculated for each subject by first multiplying the percentage points at each stage by the number of the stage, and then by summing up the products. This score gives an average of the child's usage of different stage specific responses and hence gives a more comprehensive picture than a modal stage.

Results

Study 1

Analysis of modal stages : Table 1 presents the percentage of subjects at each age (i.e. 8, 9, 10, 11, and 12 years) at each moral stage (because some subjects obtained bimodal scores totals do not all add up to 20). Variation Scores are also shown.

Age	Stage				Mean Variation
	1	2	3	4	Scores
8	5	17	0	0	54
9	4	15	2	2	56
10	0	15	5	0	63
11	1	18	2	0	59
12	0	16	5	0	64

As expected, the upward trend in the usage of moral stages with increasing age is clearly evident in the usage of Stages 1, 2, and 3 as modal stages at the ages 8, 9, and 10 years. Looking at the total picture, it appears that a clear shift to Stage 3 would have appeared if older children had been studied.

Analysis of Stage Mixture : When compared to ages 8 and 9, higher variation scores were observed during the ages 10, 11, and 12 years. (The drop in modal stage as well as in variation score at age 11 is attributed to sampling effects). In order to analyze the significance of differences among the variation scores, Wilcoxon's Rank-Sumtest was used.

Analysis of Weighted Issue Scores : The weighted issue scores at ages 8, 10, and 12 years were analyzed in a 3 × 10 (Age × Issues) repeated measures analysis of variance, with issues as the repeated measures. The between group independent variable was Age, while the within group independent variable was Issues.

ANOVA Age X Issue Scores

Source of variation	F
Between subjects	
Age (A)	35.8057***
Within subjects	
Issues (B)	6.8821**
A × B	1.6179*

***$p < .001$
**$p < .01$
*$p < .05$

As expected, the Age and Issues main effects were significant as also the interaction between Age x Issues.

The Newman-Keuls Test was used to test for the significance of differences among Age and Issues totals. There was a significant ($p < .01$) differences between the total Issue Scores of the 8 and 10 years olds, and the 8 and 12 years olds. The difference between 10 and 12 year olds was only marginally significant ($p < .05$).

Comparison of the totals of tha Issue Scores on the 10 issues reveals that scores on issues presumably more familiar to the children like mother-daughter relationship, father-son relationship, life, and punishment are significantly higher than on less familiar issues namely contract-property and property-trust.

Study 2

The scheme of analysis for Study 2 was as follows :

1. Inferential statistical analysis including :

(a) Analysis of variance of Moral Maturity Scores (MMS) and each of the five Issue Scores.

(b) Repeated measures analysis of variance with issues as within subject variable, and Age, Sex, and Social class as between subjects variables.

(c) Multiple comparisons of (i) mean MMS, Variation scores and Issues Scores, classified according to age, sex and social class; (ii) mean Issue Scores.

2. *Descriptive statistical analysis* consisting of two parts,

(a) (i) Inter correlations among MMS and the Issue Scores. (ii) Factor analysis of the Issue Scores.

(b) Data sorted according to the ten relevant background factors.

Analysis of variance, mean comparisons, and modal stages.

Age differences : There are significant age differences in the moral judgement scores of the age group under study 10-15 years. In terms of modal stages the age change that is evident is mainly in the shift from stage 2 to stage 3. The shift is marked in the oldest age group of the upper class.

Sex differences : There are no significant sex differences in the moral judgement scores, the only exception being scores on Issue 1, namely, life.

Differences among five Issue Scores : The main effect of issues was significant. Newman-Keuls contrasts among the five Issue Scores indicated that scores on issues 4, 3, and 1 rank significantly higher than issues 2 and 5, but not from each other. Scores on issues 2 and 5 in turn differ significantly from each other, with issue 2 ranking lowest.

Social Class differences : There are significant differences between the moral judgement scores of upper and lower class children, with upper class children having a clear edge over the lower class children in a stage wise progression of moral judgement.

Intercorrelations among the MMS and issue scores : The intercorrelations among all five issue scores and MMS are positive and significant.

Factor analysis of the issue scores : There appears to be a general factor which accounts for a substantial portion (50%) of the total variance. At the same time there is a specificity dimension associated with specific moral issues.

Data sorted according to relevant background information : The mean moral judgement scores indicate a trend in favour of the nuclear family, smaller family size, higher educational and occupational level (of both father and mother), and upto a certain point, high income level.

Concluding Comments

In sum, data obtained from both Study 1 and Study 2 provide empirical support for the assumption of sequential and stage-wise progression of moral judgement. There is also clear evidence that there is increasing use of higher stages with increasing age. Both studies reveal higher stage mixture during periods of developmental shift. Study 2 provides empirical evidence for significant social class differences which are markedly in favour of the upper class. Specific family background characteristics that show a positive relationship with moral reasoning are nuclear family, small size family, higher education and occupation levels for mother and father. As hypothesized no significant sex differences were found in moral judgement. There is substantial evidence for generality of moral judgement ; evidence regarding specificity is also present to a lesser extent.

Verma, S. Social class differences in the development of moral judgement in girls of ages 10-12 years. 1976. Saolapurkar, S. Sex differences in moral judgement of children from 10-12 years. 1976.

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Saraswathi, T. S., Takkar, D., Kaur, I., Kapadia, R., Bhatnagar, C.

Perceived Maternal Disciplinary Practices and Their Relation to Development of Moral Judgement. 1977-1978.

Project Sponsored by Indian Council of Social Science Research.

The major objective of the research reported herein was to obtain a comprehensive picture of sex and social class differences in the relationship between maternal disciplinary practices and the development of moral judgement. Data on moral judgement was available for a sample of 360 children from a previous project (Saraswathi, Sundaresan, and Saxena, 1977).

Objectives

The primary objective of the present study was to assess the maternal disciplinary practices and relate the same to development of moral judgement in children.

The secondary objectives of the study included:

1. To study the effect of paternal disciplinary practices for a sub-group of the sample and
2. To collect mothers' reports to establish a reliable technique for obtaining data from mothers and, to cross check mother's responses with that of their sons on the same issue. Children's reports on disciplinary practices were used as data in the main study.

Utilizing a sample of 249 children who could be contacted from the original sample of 360 (the oldest age group having graduated from the school in the interim period). Data reported herein was collected over a period of two years, June 1976 to April 1978, by a series of trained investigators. The sample represented 10-15 year old boys and girls from the upper middle and working class backgrounds.

Method

1. *Assessment of Moral Judgement*

The sample consisted of 360 children, of three age groups (10-11, 12-13, and 14-15 years), of both sexes and two social classes (working class and upper middle class). There were 30 children in each cell of the Age × Sex × Social Class composition. Kohlberg's Moral Judgement Test (Form A) adapted to Indian situations (Sundaresan, 1975) was used to collect data on moral judgement of the children. The children were interviewed individually by two trained interviewers, in one or two 30-40 minutes sessions, on the school premises.

Each child's responses were scored according to Kohlberg's scoring manual (1973). Inter scorer reliability was. 88.

2. *Assessment of Maternal Disciplinary Practices*

Child's report : Of the original sample of 360 children assessed for moral judgement, a total of 249 children were available for the assessment of maternal disciplinary practices.

A structured interview schedule consisting of 15 daily life situations which were likely to call for the use of disciplinary measures by the mother was used to assess the children's perception of maternal disciplinary practices. A structured response list was used with the upper middle class sample. The response list consisted of 12 responses, 4 from each category of disciplinary technique (i. e. power assertion, love withdrawal, and induction). For the working class sample, open ended response method was used instead of the structured response list. All the children were interviewed individually on the school premises in 20-30 minutes sessions. The responses of both groups were probed to ensure accurate interpretation by the interviewer. Each of the child's response to each of the 15 situations was rated as falling under any one of the three categories of disciplinary practices. namely, power assertion, love withdrawal, and induction, and a score of ' 1 ' was assigned for the specific category. All scoring was done by trained workers. After scoring all of the child's resposes, the frequency of responses in each of the three categories of discipline was calculated.

3. *Assessment of Maternal Disciplinary Practices*

Mother's report : The sample consisted of 28 mothers who formed one cell of the Age × Sex × Social Class grouping.

The tool used for the mothers' interviews was similar to the one used with the children. However, the total number of situations to which the mothers ' responded to were ten. The situations were also kept comparatively less structured in the case of the mothers. Initially, pilot interviews were conducted with five mothers in order to finalize details regarding the interview procedures that would help yield reliable information.

After relating each of the 10 situations to the mother and recording her responses verbatim, the interviewer asked the mother to recollect 3 to 5 situations which had occurred in the past two to three weeks and narrate how she handled them. At the end of the interview, the mothers were requested to make general comments regarding their usual mode of disciplining and their reasons regarding the need for the same. These responses were obtained to get a general picture regarding whether the disciplinary measures used were child or parent centered or oriented toward social conformity. All interviews were conducted at home in either Hindi or English depending on the mothers preference.

4. *Assessment of Paternal Disciplinary Practices*

Child's report : Twenty eight boys and 25 girls of the upper middle class constituted the sample for this aspect of the study. The tool and procedure followed were the same as used in Section 2 i.e. Assessment of maternal disciplinary practices : child's report, except that in the instructions and probe questions, the term 'father' was used instead of 'mother'. Scoring procedure as indicated in Section 2 was used for both Sections 3 and 4.

Analysis of the Data

Statistical procedures employed in the analysis of data included product moment correlation between moral maturity scores (MMS) and each of the category of maternal disciplinary practices; mean MMS of comparisons of children falling under predominant (eg. induction or power assertion) categories of discipline; relevant Sex and Social class comparison of frequency of reported usage of power assertion, induction, and love withdrawal as disciplinary techniques by parents. Also included were comparisons between mothers and sons reports, as well as between maternal and paternal discipline, for the sub-groups for which such additional data was available.

Results and Discussion

1. *Relationships between MMS and Perceived Maternal Disciplinary Practices*

The results of the analysis revealed a general pattern of negative correlations between MMS and power assertion and positive correlations between MMS and induction. The correlations were statistically significant only for upper middle class girls and approached zero for working class boys. Unlike power assertion and induction, the pattern of correlations with love withdrawal were not consistent in terms of direction.

A comparison of mean MMS of children whose mothers used power assertion as a predominant technique (70% or above of total measures) with those of children whose mothers used mixed disciplinary practices (60 : 40 combination of power assertion and induction) indicated a significant difference in favour of the latter group. Very few parents could be categorized as using induction predominantly (70% or above usage).

2. *Social Class and Sex Differences in Perceived Maternal Disciplinary Practices*

Children of both the social classes reported predominant use of power assertion by their mothers and fathers. The analyses also revealed a moderate tendency for boys and girls to perceive the parent of the opposite sex as more lenient than the parent of the same sex. Fathers especially, seldom seemed to use physical punishment with girls. For both boys and girls, mothers seemed to use relatively higher levels of reasoning (induction).

3. *Comparison of Mother's and Children's Reports on Perceived Maternal Disciplinary Practices*

A degree of consensus existed between mother's and children's reports of maternal discipline. About 75 percent of the mother child pairs showed high

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agreement (80% agreement or above) in their responses, with only 25% showing a discrepant rating. There was, however, a tendency on the part of the mothers to report higher use of induction, while children reported more use of power assertion.

4. *Comparison of Maternal and Paternal Disciplinary Practices*

Correlations between the perceived paternal and maternal practices were remarkably high for boys (power assertion $r = .66$, induction $r = .73$ and love withdrawal $r = .51$ all $p < .01$) and were positive but not statistically significant for girls (power assertion $r = .34$, induction $r = .30$, and love withdrawal $r = .34$)

Discussion

The discussion is divided into four major sections which includes theoretical issues; cross cultural perspective of the empirical findings; methodological issues and implications for child rearing.

1. *Theoretical issues :* The key theoretical issue centers on the need for a theoretical explication of induction as provision of role taking opportunities v/s as verbalization of standards. The possibility of differential effect of the two modes of induction on moral socialization is commented upon.

2. *Cross cultural perspective :* For the cross cultural perspective, it is tentatively proposed that in a tradition bound, authority oriented culture wherein social conformity rather than rational morality is emphasized and wherein power assertion is not necessarily perceived as hostile, it is quite likely that both the expected positive effect of induction and the negative effect of power assertion are nullified, producing the observed floor effect of low correlations. Viewed in the context of the larger cultural setting the disciplinary measures may themselves take on a connotation that is culturally relative.

4. *Methodological issues :* The two methodological issues of particular relevance to this study include data source, and techniques for obtaining information. Regarding the first question ' who should provide the information the child or the mother ? ' the answer, atleast as far as maternal disciplinary practices are concerned, seems to be the ' child '. This in view of the observation that children's reports seemed least contaminated by the factor of social desirability. However, it did come through that reliable data on issues involving a considerable degree of ego-involvement of the mother, can be obtained when the interviewer adopts a stance of the non-judgemental information seeker rather than the ' expert '. As for the second question " What method is most appropriate for obtaining relevant data for this research area ? ", a semi-structured schedule of daily life disciplinary situations with an open ended response measure seems to be the best method, as by using the open ended response form it becomes possible to ask the child to give a detailed description of how his mother/father would react to a particular situation.

4. *Implications for child rearing*: Finally, in terms of implications of the present study for child rearing, it is concluded that the two most essential elements of a reasonable scheme of discipline are, (a) the need to impress on the child the needs and restrictions of reality rather than the power of the adults, and (b) the need to deal with children as equals and with respect for their individuality.

Saraswathi, T. S., Sundaresan. J. A Short-Term Longitudinal Study of the Development of Moral Judgement in Indian Boys. 1979.

The cognitive developmental conceptualisation of stages of moral judgement not only proposes the description of normative development in moral thinking, it also suggests a theory of how moral development proceeds.

Longitudinal evidence validating the stage sequence assumptions has to date been very sparse. These include work by Holstein (1976), Kohlberg and Kramer (1969), and Turiel, Edwards, and Kohlberg (1978). Aronfreed's (1976) critique in this regard stresses this shortcoming. He argues that most of the relevant evidence from moral stages is not in the form of longitudinal succession within the individual, but consists rather of increments and declines of specific stages over cross-sectional groups of respondents of different ages, together with a high incidence of mixed but adjacent stages within a prescribed order.

The focus of the present study hence, was to obtain short-term longitudinal data from a sample of Indian boys for whom data on moral judgement was available from a previous project (Saraswathi, Sundaresan, and Saxena, 1977).

Method

Sample

The sample consisted of 55 boys from two social classes (upper middle class n = 28 and working class n = 27). At the first and second testings, the

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Takkar, D. Boy's Perception of Maternal Disciplinary Practices and their Relation to Development of Moral Judgement in 10 to 13 years olds. 1977.

Kaur, I. Perceived Maternal Disciplinary Practices and their Relation to Development of Moral Judgement in 10-13 year old Girls. 1977.

Bhatnagar, C. Perceived Maternal Disciplinary Practices and their Relation to Development of Moral Judgement in 10-15 year old Girls in Lower Middle Social Class. 1978.

Kapadia, R. Perceived Maternal Disciplinary Practices and their Relation to Development of Moral Judgement in 10-15 year old Boys in Lower Middle Class. 1978.

Saraswathi, T. S. Perceived Maternal Disciplinary Practices and their Relation to Development of Moral Judgement. 1978.

boys were 10-11 years of age and 12-13 years of age respectively. Children of the upper class had fathers who were graduates and/or had professional training, held professional or semi-professional occupations, and whose family income was fairly high by Indian standards. Children of working class had fathers who held a high school certificate or diploma, were employed as skilled or unskilled workers, and whose family income was fairly low by Indian standards

Tool

Sundaresan's (1975) adaptation of Kohlberg's moral Judgement test for Indian children was used to assess the children's moral judgement levels. Form A of the test, consisting of three stories was used for both 1976 and 1978 testings. The children were interviewed individually in one or two sessions of approximately 30 minutes to 45 minutes each depending on the responsiveness of the child. The interviews were conducted in Hindi or English depending on the child's preference and taped with the child's permission. The taped interviews were transcribed verbatim and coded for scoring.

Scoring

Each child's responses were scored according to Kohlberg's Scoring Manual (1973). All the moral issues, namely, Life, Punishment, Father-Son relations, Contract-Property, and Contract-Promise were scored separately. The Moral Maturity Score (MMS), which is a weighted average of scores obtained in the different moral stages (Turiel, 1966) were computed for each child. Inter-scorer reliability was .88. Transcripts of interviews rated at Time 1 were again recorded at Time 2 in order to check for any discrepancy in scoring.

From each child's profile of percentage usage of each stage, the modal and sub-stage(s) and the MMS were calculated.

Results

1. *Modal stages and sub-stages*

There is a decrease in the use of lower stages (i.e. stages 1 and 2) and an increase in the use of stage 3 in both social classes. The increase is more clearly evident in the upper middle class children than in the working class.

2. *Mean Moral Maturity Scores (MMS)*

In terms of MMS, the upper class boys showed a gain of 36, while the working class boys showed a gain of 13 only during 1976 to 1978. Stage 2 was observed to be the most frequently used stage of reasoning in both the groups at both times of testing.

3. *Highest stage of Substantial usage*

Substantial usage is defined as a usage of 20 per cent or more of a speific stage (Rest, 1976). The shift from stage 2 to stage 3 is more clearly evident in this case for both social classes, than it had been when either modal (sub) stage or MMS were used as indices.

4. *Individual Pattern of Change*

An even finer analysis is possible by considering the stage distribution of individual subjects. Information on individual data may be summarized as follows : (a) there is a gradual, but clear shift in the usage of stages 1, 2, and 3 ; (b) predominantly the shift is from stage 2 to stage 3 ; (c) Stage 3 is the most frequently observed highest stage of substantial usage, and stage 2 the most frequently observed lowest-stage of substantial usage ; (d) the most marked feature of the individual data is the occurrence of regression in scores in seven cases (three from the upper class and four from the lower class).

Concluding Comments

In sum, the data demonstrates the need for,

1. A reformulation of the theoretical frame of reference for studying the development of moral judgement ; and
2. Re-examining the most frequently used indices for locating a subject in the moral development sequence. It is proposed that the theoretical framework suggested by Eckensberger and Reinshagen (1977), and Eckensberger (1981), as well as Rest's (1976) model for indexing developmental shift in terms of highest and lowest stages of substantial usage may prove more useful.

SOCIALIZATION AND PERSONALITY

Ichapunani, A. Measuring Aggression in Pre-School Children and Relating it to Child Rearing Practices. 1966.

Aggression, 'the act of hurting another person intentionally', is one of the very common characteristics of human behaviour. It is a socially learned behaviour and like many other social responses it can be learned by imitating models especially during the pre-school age. Living within a social setting, a child has to learn to manifest aggressive behaviour in a socially acceptable way. How the child learns to do so is influenced by his environment and social groups he comes in contact with.

Family is the first socializing institution a child experiences, and parents the first models. Hence, there is a likelihood of imitating their behaviour. Therefore, it is meaningful to study the effect of modelling and the influence of the family and the child rearing practices on child's expression of aggression.

Objectives

1. To find out the effect of exposure to an aggressive model on the children's aggressive behaviour and to measure it in an experimental situation.
2. To find out the differences between aggression exhibited by boys and girls during experimental manipulation.
3. To study the relationship between child rearing practices adopted by mothers and the aggression exhibited in the experimental situation.

Hypotheses

1. The group exposed to an aggressive model will show significantly more total aggression than the other two groups i.e. exposed to a non-aggressive model and no model.
2. The group exposed to an aggressive model will show significantly more of imitative and non-imitative aggression than the other two groups i.e. exposed to a non-aggressive model and no model.
3. Boys will show more aggression than girls in all the ages.

Method

1. *Experimental observation*

Sample

The sample consisted of 36 boys and 24 girls enrolled in the younger and the older groups of Chetan Balwadi, the laboratory nursery school of M. S. University of Baroda. The subjects were between the age range of 2 years, 6 months to 4 years, 8 months.

Design

The children were randomly divided into three equal groups, 12 boys and 8 girls in each, and were given differential treatment.

1. Experimental group I was exposed to an aggressive model.
2. Experimental group II was exposed to a non-aggressive model.
3. Control group was exposed to no model.

Procedure

The experiment was conducted in two sessions. During session I, children were exposed to their respective models for six minutes. Two B.Sc. (Home) students majoring in Child Development acted as models. They had no prior familiarity with the subjects but were familiar with the laboratory nursery school set up.

For experimental group I the aggressive model performed the following acts in sequence : (a) hitting the doll with a hammer; (b) kicking the doll with toes; (c) putting the doll on floor and riding on it; (d) flinging the doll in the air.

For experimental group II the non-aggressive model repeated the following behavioural acts in sequence : (a) making the doll walk; (b) patting the doll; (c) making the doll sit; (d) making the doll drink.

Responses like leaning forward to see the model acting, talking about the model etc. were recorded by the investigator. Time sampling of one minute was used for total time span of six minutes.

At the end of the first sesson, one minute rest was given to the subjects, after which session II started. Here children were allowed to play with variety of toys like pressing rubber toys carpentary toys, guns, etc which were pre--arranged in a fixed order for all sessions. This session was to locate the effect of exposure to the respective models on the children's aggressive behaviour.

Responses of imitation and non-imitation behaviour like hitting and kicking the doll, hitting other children etc. were recorded. The total time for session II as fifteen minutes, which was time sampled for every minute.

The control group was directly taken to session II.

Analysis

The observations were analysed separately for session I and session II. Each entry made in the recording sheet was given one score. Total score was counted by adding the entries for each item and for each child separately. The analysis was done in the following manner :

1. The analysis of variance was done on the scores of three categories of aggression, namely, total aggression, imitative aggression, and non-imitative aggression for three groups under study.

2. 'F' ratio was calculated in order to find the significant differences in the mean performance of three groups for three categories of aggresson.

3. 't' test was used to find out the significance of differences between and within the three groups.

4. The co-efficient of correlation between the anxiety scores of session I and the aggression shown during session II for experimental group I

5. The contingency co-efficient for level of anxiety and interest shown in the model for subjects of experimental group I.

2. *Child rearing practices*

Sample

Mothers of all the 60 children included in the experimental study were interviewed.

Tool

A structured interview schedule was used, consisting of items like, mothers interaction with the baby, demands and restrictions, permissiveness for aggression, punitiveness for aggression, and child rearing practices in terms of rigidity, and were rated on a 3 point scale-low, moderate, and high.

Procedure

Each mother was interviewed for approximately an hour and individually by the investigator. The interview was conducted in Hindi and English according to the preference of the individual mother. The information was recorded on the spot in English.

Analysis

In order to find out relationship betweeen child rearing practices and aggression shown by subjects, the mothers were classified in 3 groups-low, moderate, and high on aspects of child rearing practices under study. The children in each of the groups were divided into three groups according to the ratings of their mothers. The mean aggression score was used as the dividing line for level of aggression.

Results

1. The group exposed to an aggressive model showed significantly more of total aggression and more of non imitative aggression than the two groups exposed to a non-aggressive model and no model.

2. The three groups under study did not differ significantly in their mean performances on imitative aggression.

3. Boys showed significantly more total aggression than girls in all the three groups.

4. Anxiety and aggression were negatively correlated ($r = .44$) for subjects of experimental group I.

5. Low anxiety level was found to be related ($r = .34$) to high level of interest shown in the model by the subjects of experimental group I.

6. The following children showed non-aggression in experimental set up. The children having : (a) low interaction with the mother; (b) very low and very high demands and restrictions from mothers; (c) low and high permissiveness for aggression ; (d) moderate and high punitive mothers; and (e) mothers using highly rigid child rearing practices.

Vali, F. A comparative study of maternal responses towards dependent and aggressive behaviour of their 3-4 year old children as seen in two economic classes of two cultures. 1967.

The distinctive and universal function of a family is the socialization of its members. The mother through her child rearing practices teaches the child what is socially acceptable. Further maternal child rearing practices are influenced by the culture, and the social class of the mother. The type of techniques the mother uses also affect the child's behaviour.

Objectives

1. To determine the different maternal responses to the dependent behaviour of the child and to study how these responses differ from culture to culture.
2. To study whether economic status makes any difference in the mother's response to dependent behaviour of the child.
3. To study the relation between the punitive response of the mother towards dependent behaviour of the child and the aggressive behaviour of the child.

Hypotheses

1. American mothers are more rewarding and less punitive than Indian mothers towards the dependent behaviour of their 3 to 4 year old children.
2. There is a significant difference in the maternal responses of the middle class and lower class mothers towards the dependent behaviour of their 3 to 4 year old children in both Indian and American culture.
3. The children of more punitive mothers show greater aggression in the nursery school situation than the children of less punitive mothers, in both the cultures.

Method

Sample

The sample consisted of 60 mothers and their 60 children. Out of the 30 American and 30 Indian mothers, in each group, 15 mothers belonged to the middle class and 15 to the lower class. The American sample was selected from Syracuse, New York State, U.S.A. and the Indian sample was selected from Nagpur, Maharashtra.

Tools

1. *A partially structured interview schedule* constructed by Betty Caldwell, to measure the techniques used by mothers to handle various behaviours of the child was used. The schedule consists of 40 items concerning dependent behaviour (help, attention, and affection seeking behaviour) of the child in various daily situations. The schedule was modified to suit the Indian conditions.

2. Observation of the general aggressive behaviour was done keeping in mind the ten specific categories of aggression such as: interfering with other's activities; teasing and insulting; threatening or bossing; quarelling screaming or swearing; physical attacking; throwing objects; destroying something intentionally; disobeying; and temper tantrums.

Procedure

A pilot study was conducted to test the reliability of the investigator's interviewing and observation methods.

All mothers were personally interviewed by the investigator. Observation of the children was done in their respective nursery schools. In case of lower class Indian children observation of their aggressive behaviour was done in a playroom set up for them as they did not attend a regular nursery school. A teacher was duly appointed to work with the children. After the initial period of adjustment to the school setting the children were observed for their aggressive behaviour.

Data Analysis

Scores, percentages, means, standard deviations, standard errors, and critical ratios were worked out to assess group differences. Pearson's product moment correlation was used to determine the relation between the punitive response of the mother and the aggressive behaviour of the child.

Results

1. American mothers used reward more than Indian mothers towards the dependent behaviour of their 3 to 4 year old children. Whereas Indian mothers used punishment more often than their American counterparts.
2. There was no significant difference between American and Indian mothers in using the permissive technique. However, Indian mothers tended to be more permissive than their American counterparts towards their child's dependent behaviour.

3. Indian mothers resort mostly to verbal order and scolding, and least to deprivation of privileges and tangibles as far as dependent behaviour of 3 to 4 year old children are concerned! Whereas Americans use explanation and attention the most and deprivation of privileges and tangibles the least.
4. Lower class mothers were both more punitive and more rewarding than middle class mothers towards the dependent behaviour of their children in both the cultures.
5. Lower class mothers were more permissive than their middle class counterparts towards the dependent behaviour of their children in both the cultures.
6. There was a positive correlation between mother's punitive response towards dependent behaviour and children's aggressive responses in the nursery school.
7. Lower class children were more aggressive than middle class children in both the cultures.

Chokshy, S. D. Determinants of Aggression in Pre-School Children. 1963.

The present study deals with the influence of home atmosphere and mother's training of the child's overt aggressive behaviour.

Objectives

1. To identify the factors responsible for aggressive behaviour in pre-school children.
2. To study the relationship between the child-rearing practices adopted by the mother and the child's aggressive behaviour as observed in the nursery school.
3. To find out the variations in the amount and kinds of aggressive acts shown overtly by girls and boys in the nursery school.

Hypotheses

1. Severity of frustration will have a positive relationship with the amount of aggression shown by the children.
2. Children with permissive mothers will be more aggressive than children with non-permissive mothers.
3. Boys will show more overt aggression than girls.

Method

Sample

The sample of the study consisted of 18 kindergarten children, between the ages of 4 years, 2 months and 6 years, 6 months, from Chetan Balwadi, the laboratory nursery school of the M. S. University, Baroda.

Tool

1. *Observation schedule*

An observation sheet consisting of ten categories of aggression was used for the study. The ten categories were : Interfering with other's activities ; teasing or insulting ; threatening or bossing ; quarelling ; screaming or swearing ; physically attacking ; throwing objects ; destroying something intentionally ; disobeying ; and temper tantrums.

Procedure

A research assistant observed the subjects on their aggressive behaviour for 10 days continuously for two hours from 10.00 a.m. to 12.00 noon. At this time the children were engaged in outdoor and indoor play and this allowed maximum interaction within the group.

2. *Mothers interviews*

The interview schedule consisted of 71 open ended questions, which included the child-rearing practices of the mothers related to toilet training, disciplinary methods, kind of family interactions, and so on.

Procedure

The interviews lasting about 1½ hours were conducted in the teacher's office in the nursery school, where the mothers were interviewed individually, Interviews were conducted in English or Gujarati, according to the mother's preference, and their responses were recorded on the spot.

Results

1. Children who experienced more demands and restrictions at home were found to be more aggressive in the nursery school.

2. Children who had greater permissiveness for aggression among siblings, and higher demands to be aggressive were found to be more aggressive.

3. Children who were severely punished at home were found to be more aggressive in the nursery school.

4. Boys were found to be more aggressive than girls in the nursery school.

Bharadwaj. N. A Study of Techniques of Control and their relation to Expression of Aggression and Dependency in a Rural Setting. 1969.

Objectives

1. To find out the relationship between punishment and expression of aggression, and permissiveness and expression of aggression.
2. To study the relationship between various methods of control and expression of aggression.
3. To compare mother's perception and interviewer's rating regarding effectiveness of techniques of control.
4. To study sex differences in expression of aggression.

Hypotheses

1. Punishment and permissiveness are both positively related to expression of aggression.
2. Differences in the expression of aggression will be found when different disciplinary techniques are employed.
3. There are sex differences in the expression of aggression and dependency. Boys express more aggression and less dependent behaviour ; girls express more dependent behaviour and less aggression.

Method

Sample

The sample of the study came from Rajpur, a village three miles away from Baroda. For the study four major castes, Patidar, Bhil, Baria, and Vankar, who constituted 76 percent of the population, were included. From the above castes 55 families each having a five year old child were selected.

Tool

An interview schedule based on the Sears, MacCoby, and Lewin Schedule (1957) was prepared to suit the Indian setting. Out of the five systems of behaviour, oral, anal, aggression, dependency, and sex, two systems of behaviour namely aggression and dependency were selected for the present investigation. The section on aggression included information regarding physical and verbal aggression directed towards mother, father, siblings, and peers. Different methods used by mothers for controlling expressions of aggression and dependency were also listed. The section on dependency aimed at information regarding help and attention seeking behaviour of the child.

Procedure

Individual interviews were conducted with the mothers. Frequent observations of mother-child interactions were also done.

Analysis

Pearson's product moment correlation was used to determine the relation between techniques of control and expression of physical and verbal aggression directed towards mother, father, siblings, and peers. Percentages were worked out for descriptive information gathered on effectiveness of techniques of control for disciplining the child and areas of dependency.

Results

I. *Aggression*

1. Physical punishment, love withdrawal, deprivation of privileges, and threat of destruction heightened the expression of physical aggression more towards, the mother than the father. Boys exhibited more physical and verbal aggression than girls.

2. Disciplinary techniques like, deprivation of privileges, and threat of death of mother were more effective in controlling the behaviour of boys, whereas for girls physical punishment, love withdrawal, and use of rewards were more effective.

3. Boys were disciplined by fathers, and girls were disciplined by mothers.

4. Mothers were inconsistent in their behaviour especially so with girls.

II. *Dependency*

1. Girls were more often indulged by mothers than were boys and generally mothers rewarded the girls for their dependent behaviour.

2. In case of boys dependent behaviour like sleeping with mother, clinging, etc. were punished by mothers.

Parikh, N. Sex Role Preferences of Pre-School Children —An Exploratory Study. 1971.

Mehta, A. Sex Role Identification in Pre-School Children from Three Socio-Economic Classes. 1972.

Sex role differentiation takes place through a variety of highly complex processes, each of which contributes to a particular facet of personality formation, perceptual sharpening, and response reinforcement. The cultural expectations regarding sex roles highly influence this learning.

In our male-dominated Indian Society, the woman has always been the 'silent sufferer'. This suppression of girls starts from the early years, making it difficult to accept sex assigned roles without some bitterness. The two studies reported here were undertaken to explore the existing pattern of sex role preference among young children and also to study sex role identification of preschool age boys and girls from three socio-economic classes.

Objectives

1. To explore the relationship between sex role preferences and certain personality variables among young children.
2. To explore the existing pattern of sex role preference among young children
3. To explore the relationship between parents attitudes and certain personality variables among young children.

Method

Sample

The sample of Study 1 (Parikh, 1971) consisted of 24 children, 12 boys and 12 girls, from the kindergarten and older group of Chetan Balwadi. The children were randomly selected and their ages ranged from 3½ years to 4½ years.

The sample of Study 2 (Mehta, 1972) consited of 169 children of both sexes, from three different socio-economic levels and ages 3 years to 5 years.

Tools

The tools used for data collection in Study 1 (Parikh, 1971) were as follows :

1. *The Mosaic test* was used for studying interest in the subjects.
2. *Spontaneous drawing technique* was utilized to obtain spontaneous verbalized responses of the child on his/her drawing.
3. *Draw-a-man technique* was utilized to obtain evidence of sex differences through the label given to the drawn figure by the subjects.
4. *ITSC technique* was utilized to measure sex role preferences in the children.

In order to obtain an independent measure of parents' views regarding sex roles, six open-ended questions were used in interview sessions with parents.

The tools used in Study 2 (Mehta, 1972) were as follows :

1. *The vocabulary items* from revised Stanford Binet test of intelligence was used to measure the child's status in language development.
2. *The ITSC technique and Draw-a-man technique* as in Study 1 (Parikh, 1971).

Procedure

The investigators tested the children individually in their schools. The Mosaic test was administered first, followed by vocabulary items, the ITSC, and Draw-a-man technique. For the Draw-a-man, each child was asked to draw a human figure and later questioned on what he/she had drawn. These responses were recorded. The investigators tested the children individually in their schools.

The parents' interviews were conducted at their homes with previous appointments. Both parents were interviewed individually.

Results

1. There exists a clear and distinct difference among the boys and girls regarding the preferences of sex roles.
2. Girls show more mixed pattern of sex role preferences and interests whereas boys tend to be more stereotyped.
3. Parents influence the child's concept of sex role positively.
4. Socio-economic class did not make a difference in sex role preferences shown by boys and girls.
5. Our culture tends to be more liberal in their training of sex roles for females, whereas great pressure is exerted in training of masculinity for boys.

Pandya, L. A Study of the Development of Achievement Motivation in Young Children. 1971.

The child as he emerges from the initial helplessness of infancy gradually develops motivations and skills to achieve ever increasing variety of goals. With new and greater exposure to learning situations the need for achievement emerges and by the nursery or early primary school age, individual differences are apparent in strength of children's achievement needs. Research regarding the origins of need for achievement has focussed on the social conditions in which an individual learns to be motivated for achievement. It has been shown that the number of experiences in independent mastery, the age at which the training is given, and the emotional accompaniment of the training are important conditions for the development of achievement motivation in children. Parental attitudes and concern regarding children's performance, social class, and religion have also been studied to assess their influence on development of achievement.

Objectives

1. To find out the relationship between age and the two types of achievement motivation, autonomous and social.
2. To study the relationship between family type, sex of the child, intelligence, and the two types of achievement motivation, autonomous and social.

Method

Sample

The sample consisted of 40 boys and 40 girls from Jeevan Sadhana School, Baroda, between the ages of 5 to 8 years. The sample was selected on the basis of high, moderate, and low I.Q. of the subjects, as assessed on Phatak's 'Draw-a-Man Test'. Thus 20 subjects, 10 boys and 10 girls of different IQ's were selected from each age group and were included in the sample.

Tools

Assessment of children

1. *Phatak's 'Draw-a-Man test'*. Based on the Goodenough Scale it measures IQ through ratings of drawings of a human figure on especially prepared drawing sheet.

2. *Measures of autonomous achievement motivation.* The measures consisted of a graded series of tasks reflecting different skills. The child is presented with an easy version of each skill and then tasks of increasing difficulty. The tasks were arranged to guarantee at least two successes, the test administrator stopped administering a sub-test when the child failed two items in a row. Following this the child is asked to repeat one of the tasks choosing one from among very easy, moderately easy, moderately hard, and a very hard task. The choice being relative to the child's ability was assumed to reflect 'autonomous achievement' striving. The achievement tasks measure different types of skills, memory span, motor coordination, visual memory, and copying ability.

3. *Measures of social achievement motivation*

(i) *Normative level of aspiration.* The subject is presented with 3 similar looking envelops. He is told that one has a task that is easy for the child's age mates, the other is moderately hard, and the last is very hard to do. The task itself is unknown to the child and he is asked to give his preference. In making the choice it is assumed that the child is using social comparison as the basis for his achievement interest.

(ii) *Block design test*. This is the modification of Wechsler Scale for Children. The subject is required to produce 10 designs of blocks, each having a different time limit. Two trials for each design were given and testing was discontinued after two consecutive failures in reproducing the design.

Procedure

The subjects were tested for autonomous and social achievement motivation during the period of about two months. Each subject was tested individually in a separate room. The tasks of autonomous achievement motivation were administered in the following order : bead task; basket-ball task; picture memory task; and drawing task.

The measures of social achievement motivation were administered in the following order : normative level of aspiration and block design test.

Assessment of Mothers

Mothers of all the subjects were interviewed. A scale to measure jointness of families (A. A. Khatri), was used. The mothers were interviewed individually at home.

Results

1. The only significant correlations between autonomous achievement and social achievement motivation were observed for the age groups 6 years (.48) and 8 years (.53).

Family type and achievement motivation

1. The two types of families-joint and nuclear did not differ significantly on the measure of autonomous achievement motivation.

2. The two types of families joint and nuclear differed significantly in favour of nuclear families on the task of normative level of aspiration, when all the age groups were combined. When the the two age groups were analysed separately, the significant difference was found only in the first age group (5-6 years).

3. Boys and girls did not differ significantly on measures of autonomous achievement motivation when all age groups were combined. However, boys and girls differed significantly in favour of girls on the block design test, which is one of the measures of social achievement motivation.

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Inter correlations between the four repetitive tasks of Autonomous Achievement Motivation

1. Inter correlations among the scores on four tasks of autonomous achievement motivation indicate that out of six correlations four are positive and marginally significant.

2. The correlation between the two measures of achievement motivation is positive but not significant.

Sharma, P., Saraswathi, T. S., Gir, S. Role of Parents and Teachers in Promoting Social Competence. 1980.

Sharma, P., Saraswathi, T. S. Gir, S. Development of Social Competence; The Schools' Obligation to Children and Adolescents. 1980

Competence in general refers to an individual's challenging and dynamic interaction with the material environment and struggle for success in attaining mastery over the environment (Ali, 1973). White (1959) regards that striving for competence is based on an inherent property of man—the basic drive of ' effectence ' – the desire to excel. This drive is an innate property of the child at birth. It leads to the motivation to be competent, to effectively manipulate the environment to the person's advantage in achieving his ends.

From the researches reviewed it emerges that certain personality traits, characterize competent individuals. These characteristics associated with competent performance vary in different settings for children with varied background and for each sex.

Objectives

1. To study the personality characteristics of school children (12-16 years) considered competent by their teachers.
2. To describe the coping strategies of competent children.
3. To identify factors that competent children perceive as significantly responsible for the development of their competence.
4. To present a profile of a typical competent child.

Method

Sample and Procedure

A total of 110 children, 55 boys and 55 girls constituted the sample. All children were within the age range of 12-16 years and were selected on the basis of class-teachers' rating on their (a) above average academic performance, (b) participation in extracurricular activities, and (c) social popularity. Schools having sufficiently small classes and providing for a lot of teacher pupil interaction were selected. The children were contacted at school and tests administered during the free periods. Data was collected in 3-4 sessions of one hour each.

Tools, Procedure and Scoring

A number of tools were used to tap the various dimensions of information. A summary of description of the tools is as follows :

1. To obtain children's self report on personality characteristics that are "most descriptive" and "not descriptive" of them, a modified version of Gough's Adjective Inventory II (Marks, Seeman, and Halter, 1974) was used.

2. To determine the locus of control, (a) Rotter's I-E Scale and (b) Crandall's Intellectual Achievement Responsibility Questionnaire (Lefcourt, 1976) were used.

3. To study coping strategies Coelho's (1962) semi-projective pictures were adapted by the investigators. Pictorial forms of ten conflict situations related to coping with final exams, managing solitude, and other problems related to home and school were used. Children were asked to write short-stories based on the scenes, and the stories were rated in terms of (a) *resolution* of the problem, (b) *active striving* on the part of the main character to bring about a resolution, and (c) the *favorableness* of the outcome. Rating was done on a 15 point scale.

4. A semi structured interview was conducted to identify the factors related to the development of competence as perceived by the child. A schedule consisting of questions on home, school, peers, community, role of self, and related items was used as a guideline for the interview. Children were tested/interviewed in 3 to 4 separate hour long sessions either on the school premises or at home depending upon the child's school schedule and availability of room facilities.

Results

The highlights of the results may be summarized as follows :

1. The description of competent children of their own personalities indicates their positive self concept, belief in their abilities, and an inclination to conform to the conventional image of sex typed ideas. These qualities come through in their choice of adjectives that are most applicable to them as well as the ones not applicable to them.

2. Competent children emerge mostly as having an internal locus of control indicating their belief in the instrumentality of their actions in the attainment of the reinforcement they receive. Particularly on items which routinely occur in the academic setting, their acceptance of credit for positive experiences and blame for negative consequences are equally high.

3. Competent children are characterised by an effective coping strategy in dealing with challenging situations in their immediate environment. In their

projective analysis of problem situation they come up with clear and conclusive solutions, fairly effortful and forceful activity, and anticipate a favorable outcome.

4. Summing up the influences of various factors the following observations may be made :

Home. Parents who seem to provide a favorable home environment in which the child is free from anxieties. is provided with most of the facilities needed, is encouraged in his efforts, have a crucial role to play. With regard to development of various abilities like academic skills, social skills, reading interests, and participation in a wide range of activities, the home environment is particularly important.

School. Three crucial factors emerge and they are outstanding teachers, relatively free student teacher interaction patterns, and the availability of a number of facilities for extra-curricular activities. All these play a role in the development of self-confidence, sense of independence, skills at public speaking, and other co-and extra-curricular activities.

Peer group. An important supportive role in development of social skills, academic competencies, and varied interests, is played by the peer group. In the case of some children the influence of the community was considerable with provision for group interaction.

Concluding Comments

In conclusion it can be said that though the inner striving for competence characterises all individuals, competent behaviours are promoted through motivation, discipline, and quality of experiences provided during childhood years, both by the home and the school. It can also be said that, evidently in addition to mastery in dealing with objects in the environment or one's own task (academic achievement, extra-curricular activities, peer adjustment), development of social skills and emotional stability are essential for the development of a stable sense of competence. Parents and teachers will probably agree that these behaviours only will ultimately lead to school success and success in life, good adjustment, and positive mental health.

As in case of learning of most behaviours, the capacity to learn competent behaviours may not primarily be a question of native ability alone (as inner striving for competence exists in all), but rather one of motivation, discipline, and the quality of experiences provided during childhood, the most impressionable and formative years.

Gir, S. Development of Competence, Related Personality Characteristic and Coping Strategies of Competent Boys, 1979.

Sharma, P. Development of Competence, Related Personality Characteristics and Coping Strategres of Competent Girls. 1979.

Kurien, V. A Developmental Study of the Social Status of Children from Four to Eight Years of Age. 1974

Man is a social animal with strong needs to relate himself significantly and meaningfully to others of his own kind. This need to relate to others develops at a very early age. The need to understand the meaning of friendship, sociometric status, and social acceptance in pre-school years becomes essential for comprehending the foundation of interpersonal relations and as a basis for effective child guidance. Like the home and the school, the peer group is an important socializing agent. Bossard and Boll (1956) maintain that the process of moving away from the small world of one's family, to the world of others, is usually under way before the fourth year.

The present investigation makes an attempt to study the social status of pre-school and elementary school children, and the stability of social status over a period of time, and across various situations.

Objective

The major objective of the present investigation was to study the effect of variables (a) Age, (b) Sex, and (c) Situation, in determining the social status and the stability of this status, over a period of time. (Age was considered the between group independent variable, sex was the within group variable, and situation was the within subjects variable).

Method

Sample

The sample consisted of a total of 105 children from four age groups and two different schools. There were 37 girls and 68 boys within the age range of 4 years, 3 months, to 8 years, 3 months.

Tool

The task employed was based on the picture sociometric interview technique developed by Mc Candles and Marshall (1957) for use with young children. The tool consisted of bust photograph of each child in the group, mounted on a picture board.

Procedure

Each subject was interviewed individually, on two occasions. The investigator accompanied the subject from classroom to the test room and spent as much time as necessary to establish rapport. The second interview was conducted after a week of the first interview. Before beginning the task, instructions were given in English or Gujarati.

After confirming that the child could identify himself and his class-mates from the picture correctly, he was asked to select playmates for each situation, namely, outdoor, and indoor play, and close friendship were registered for each question. The time taken for each subject ranged from 10-20 minute.

Analysis

Statistical analysis included product moment correlations, and chi square tests.

Results

1. There is significant relationship between the sociometric scores obtained over a period of time (one week in this study).

2. As age increases, the stability of social status also increases. The stability of social status increased markedly when age interval was about two years, but not at successive ages.

3. There is significant relationship between the sociometric scores of children obtained in three different situations (outdoor play, indoor play, and intimate friendship of the child).

4. Sex of the child makes a marked difference in children's selection of friends. The tendency was for boys to choose boys, and for girls to choose girls as friends. There was complete sex cleavage observed despite situational differences.

Pathak, P. Behaviour Problems of Normal School Going Boys of Seven, Eight, Nine, and Ten Years of Age as Indicated by Parents, Boys, and Teachers. 1973.

Sponsorship U.G.C. Research Scheme. 1965-1967.

As a process of growth and development it is inevitable that a child has to face new situations and learn proper responses. It is natural that when a child is trying to cope with new situations some behaviour which is not acceptable to the people around will occur in any child. As a part of understanding the child as he grows and develops, it was thought worthwhile to know something about the occurrence of problem behaviour in children not referred to a clinic for deviant behaviour. Such a knowledge, it was felt, would modify the concept of problem behaviour when applied to children in normal educational instructions. The information may also prove to be useful in counselling parents.

Objectives

1. To record the incidence of problem behaviours in normal school going boys as indicators of their developmental problems.
2. To study the recorded problem behaviours for their appearance and disappearance in the age group under study.

3. To locate the patterns of problem behaviours as related to age.
4. To study the changes in the located patterns of problem behaviours in each age group over a period of one academic year.

Method

Sample

The sample consisted of 122 boys, in the age group of 7, 8, 9 and 10 years from four elementary schools of Baroda. The children fell in the IQ range of 95-110 on Phatak's Draw-a-Man test, were judged as healthy by a paediatrician, and resided with both the parents.

Design and Tool

A short term longitudinal approach was used in the study. Data was collected through interviews and questionnaires.

Interview Schedule

Family background questionnaire refers to the family background and the living conditions of the child.

Child in the family questionnaire was used to collect the history of the child's life in the family from the point of view of his position, attachments, illnesses, and major incidents in the family affecting its composition.

Problem behaviours. Three questionnaires were used to collect data on the problem behaviours of the boys from parents, teachers, and the boys themselves.

Procedure

Both the parents and the children responded to the questionnaire orally with the research assistants recording their responses. Cooperation of the parents for giving the required information was ensured by obtaining prior permission. As far as possible the data from boys and their parents were obtained on the same day. The teachers were requested to answer their questionnaire at their convenience but within 15 days. The data was collected thrice during the academic year of June 1965 to April 1966

Analysis

1. The incidence of problem behaviour was noted by counting the number of boys manifesting problem behaviours sometime during the year. The frequency of such boys was also used in studying shifts in any problems behaviour in different age groups.

2. The total scores for each boy on the 8 questionnaires were counted separately. Mean scores on problem behaviours for each age group were calculated separately for each recording, on each questionnaire.

3. Critical ratios were calculated for the differences in the mean scores of consecutive age groups and at consecutive readings of each group.

Results

Problem behaviours as observed by parents

The parents responses about the problem behaviour of their children might be summarised of follows :

1. Some problem behaviour of normal children has been reported by most parents.

2. The boys in the age groups of 7 and 10 are observed as having more problem behaviour than 8 and 9 year olds. They are significantly so at the beginning of academic year.

3. Many boys in all the age groups under study tend to be irritable and quarrelsome. They also tend to tell lies.

4. Problem behaviour related to home work and careful handling of the school material increases as the age increases.

Problem behaviours indicated by the boys experiences of parental displeasure

The observations based upon the boys experiences of parental displeasure, might be summarized as follows:

1. Parental displeasure is a common experience of the normal boys under study.

2. Boys experience punishment by the parents more at the beginning of the school year than later. This concurs with parents' observation.

3. Boys at all ages continue to experience parental displeasure on being irritable, quarreling, fighting, teasing other children, and lying. The general trend of these observations agrees with parents responses.

Problem behaviours indicated by boys experiences of teacher dissatisfaction

The analysis of the problem behaviours indicated by the teachers dissatisfaction as experienced by the boys might be summarised as follows:

4. There were some boys in all the age groups who did not report any experience of teachers dissatisfaction, for any of the behaviours studied. Comparatively there were more such boys in the eight and nine year old groups.

5. Fighting with other boys is a common problem behaviour in all age groups indicated by the teachers' dissatisfaction.

Problem behaviours according to teachers' observation

The analysis of teachers responses to the questionnaire might be summarised as follows:

6. There were very few boys who did not manifest problem behaviours according to teachers, and all the problem behaviours indicated in the questionnaire had been manifested by atleast some boys during the period of study.

Concluding comments

The longitudinal study of problem behaviours of normal school going boys of seven, eight, nine, and ten year olds has provided good evidence for the assumption that normal boys are likely to manifest some problem behaviour or other.

Revathi, K. Some College Girls' Attitudes Towards Parental Control. 1963

The transitional period of adolescence and youth has for long been regarded as one of particular interest, importance, and significance. Chronologically, the adolescent group is made up of persons 12-20 years of age, psychologically, it refers to those terminating a prolonged period of infancy, and sociologically it includes those trying to bridge the gap between dependent childhood and self-sufficient adulthood. For the training and guidance of the young, the first and most important place is the home. Often differences in values and ideas between parents and adolescents lead to conflicts making life difficult for both. The present study focusses on the attitudes of the adolescent girls regarding parental control.

Objective

The study aimed at identifying the attitudes of college girls towards parental control in the areas of personal appearance, education and vocation, choice of friends, and marriage.

Method

Sample

Forty-five unattached and unmarried students of the IIIrd Year (1963) of the Faculty of Home Science, M. S. University of Baroda, of the age range 17-21 years constituted the sample for the study.

Tool

An attitude scale including 21 items under each of the major categories, namely, parental appearance, choice of friends, education and vocation, and marriage was prepared by the investigator and used for data collection. The answers were rated on a 4 point scale, as 'always', 'often', 'sometimes', and 'never'. One open ended question to provide the subjects the opportunity for subjective expression and qualification about the entire relationship, was also included.

Procedure

The investigator explained the need and purpose of the study to the students and assured confidentiality of their responses. The questionnaires were distributed to the students in class and doubts were clarified.

Results

1. Direct parental influence was preferred by a maximum of 42.5% subjects in the items on preferences in selection of marriage partner.

2. A large number of subjects expressed preference for indirect parental influence ; the areas could be ranked as, choice of friends, marriage, education and vocation, and personal appearance.

3. Many subjects expressed a preference of paternal non-interference in their choice of girl friends, and maternal non-interference in their selection of subject of study and progress in college work.

4. In most cases, indirect parental influence was preferred and accepted significantly more than direct or no interference.

Joshi, A. A Study of Attitudes Towards Self and Their Relationships with Various Background Factors and Academic Achievement. 1964.

The attitudes towards self, either positive or negative have a great bearing on the individual's personality. A positive attitude towards self denotes confidence and optimism with ability to face life situations courageously, while a negative orientation towards one's self may give rise to pessimism and self-doubt.

Early experiences, and other environmental influences including the social context in which the individual lives are factors responsible for the individual's attitudes towards himself. For a student, his attitudes towards self determines to a large extent his participation and achievement in the academic sphere. The present study investigated college girls' attitudes towards self as related to different factors in their environment and academic achievement.

Objectives

1. To identify the relationship between the environmental factors such as family, parental attitudes, disciplining methods, socioeconomic status, and attitudes towards self.

2. To study the relationship between attitude towards self and academic achievement of the college girls.

Method

Sample

The sample consisted of 50 first and second year students of the Faculty of Home Science whose ages ranged from 16-23 years. The subjects were selected on the basis of a sentence completion test. The items of the test elicited the students' opinions regarding their parents, friends, as well as their own attitudes towards themselves. Their responses were scored on a five point scale. Out of these, 25 scoring the highest and 25 scoring the lowest were included as subjects in the study.

Tool

Questionnaire method was used to obtain background information on the students. These included parent's level of education and occupation, their caste, community, age, and the type of family system. Where probing was essential to obtain additional information, the interview method was utilized.

Procedure

Individual interviews were undertaken each lasting from 1½ hours to 3 hours. Information on academic achievement was obtained from the available college records and the grade points of one term in college were used to ascertain the level of academic achievement of the subjects.

Results

The results of this study indicate that the following background factors are related to the positive and negative attitudes towards self:

1. *Factors related to positive attitudes*: (a) a warm, affectionate and democratic parent-child relationship; (b) few sad past experiences; (c) living in a single family; (d) living with parents; (e) positive reinforcement; (f) personality characteristics like sociability, and optimism in parents; (g) hobbies that involve being with people; (h) several close friends; (i) freedom in decision-making as well as mixing with members of opposite sex; (j) a positive attitude towards being a girl; (k) belief in equal acceptance of boys and girls; (l) positive personality characteristics like an outgoing nature, affectionate, and helpful, in the subject herself.

2. *Factors related to negative attitudes*. (a) feelings of rejection and not being able to get along well with parents; (b) many sad past experience; (c) living a joint family; (d) separation from parents; (e) negative reinforcement; (f) personality characteristics like irritability, and short-temper in parents; (g) hobbies that allow one to remain alone; (h) just one or two close friends; (i) lack of freedom in decision-making as well as in mixing with members of the opposite sex; (j) a negative attitude towards being a girl; (k) a belief that boys are more accepted in society than girls; (l) negative personality characteristics like social withdrawal, nervousness, and pessimism, found in the subject herself.

3. The results of the present study show that the subjects with positive attitudes towards self belonged to neither low nor high socio-economic status. The subjects with negative attitudes towards self belonged to a higher socio-economic status (Rs. 1000-3000. per month).

4. The results of the present study further indicate that girls with negative attitudes towards self tend to achieve either "high" or "low" whereas those with a positive attitude towards self tend to achieve at an average level.

5. The study also indicates a trend of more negative attitudes toward self in the second born and more positive attitudes toward self in the first born.

Mehta, R. A Case Study of Pre-Adolescents of Four Castes (Patidar, Baria, Bhil, Vankar) in a Village. 1965

Differences in cultures, castes, and communities impose different values on different groups of pre-adolescents. What is emphasized and valued at one place is looked down upon at another place and in another caste. Parents' attitudes are influenced by differences in cultures, castes, and communities. The impact of these on young rural adolescents of different castes forms the subject of the present study.

Objectives

1. To get a general picture of village pre-adolescents.
2. To determine whether there are any observable differences of handling the pre-adolescents in different castes in the rural setting.

Method

Sample

A village which is 4½ miles away from Baroda formed the setting for the study. A departmental research project was already being conducted in the same village and a good rapport had been established with the villagers,

Eight families, two from each caste, Patidar, Baria, Bhil, and Vankar were selected for the study, on the basis that each family had at least one school going child between the age of ten and twelve years and both the parents were alive.

Tool

An interview schedule was prepared in Gujarati for obtaining revalent information from the mothers and children. A few questions were taken from the Sears interview schedule.

Procedure

The data was collected by observations and interviews with members of the family, namely, mothers, fathers, grandmothers, uncles, aunts, and siblings. The maximum time for each session was one hour, conducted usually in the afternoon when most of members were free. The interview report was written immediately following the interview. For interviewing the children, the investigator visited the schools. The non-school going children were interviewed in the village office.

Observations were made of the child in the family and in the school. At home, it was possible to see them interacting with siblings, mother etc. In school, the children's participation in many activities like games, gardening, studying, etc. were noted.

The teachers were interviewed to obtain information regarding children's academic achievements.

Plan of Analysis

The data was compiled into individual case studies which included all the information about the subject, namely, family background, physique and health, school and school work, social life, life at home, daily routine, sex, work and responsibility, pocket money, interests and aspirations.

Results

1. It was found that parent's expectations and attitudes regarding child rearing affected the child's behaviour. If the parents took interest in the child's education, children studied enthusiastically; but if parents were indifferent to it, the children too were not interested. When the parents' expectations were too high, the children indicated frustration.
2. Regarding discipline, in the families where the fathers were authoritarian the children were afraid of him, but disobeyed their mothers all the same.
3. Where parents were careful about the children's habit formation, children had good habits regarding food, clothing and hygiene, and care of room etc. When parents did not take active interest in the habit formation, children also felt it was not important. All children had to take up responsibility but occasionally boys were excused from household responsibilities.
4. Parents did not give any sex education to the children.
5. The parents' financial condition did not permit them to give any pocket money to the children.
6. In terms of caste differences it was observed that:
   - (a) Patidar and Vankar parents value education while Baria and Bhil parents did not value it as much and their children were not very enthusiastic about school work.
   - (b) Bhil and Patidar children were more afraid of their fathers. In Bhil families father's discipline was very strict. In Vankar and Baria families, mother was the main disciplinary agent.

Murti, P. K. A Study of some of the Factors Related to Adjustment Problems of Adolescent Girls. 1969.

Bhatt, N. A Study of Factors Related to Social and Personal Adjustment Problems of Adolescent Girls in Faculty of Home Science and Preparatory Unit of Arts. 1969.

Bakshi, P. A Comparative Study of the Factors Related to Adjustment Problems of A Selected Sample of Adolescent Boys and Girls. 1969.

Adolescence is that crucial phase in every individual's life where he leaves behind his much sheltered world of childhood and steps into the world of adulthood characterised by conflicts, tension, uncertainties etc. More often than not adolescence has been aptly described as the 'terrible teens'—a period when the teenager finds himself facing the problem of 'identity crisis'. Society expect him to realize his personal uniqueness yet at the same time develop a sense of conformity and identification with the world around him. It is no surprise then that the adolescent invariably finds himself in conflict with parents, teachers, or friends and these ultimately lead to personal and social adjustment problems. Moreover, our society has witnessed many changes in various spheres. This has brought about changes in ideas, attitudes and values. All these have resulted in creating personal and social adjustment problems in the adolescent.

Many psychologists, educators, and researchers have been trying to underestand and explain the unique phenomenon of adolescence. The set of studies reported here were carried out to investigate the factors such as socio-economic status of the family, size of the family, place of residence, and number of siblings as related to the adjustment problems of the adolescents.

Objectives

1. To study the effect of socio-economic status, size of family, place of residence, ordinal position, number of siblings, academic achievement, and age af menarche on the adjustment problems of the adolescents.
2. To compare adolescent boys and girls with a view to determine the difference in types of problems faced by them.
3. To find out whether the subjects who have more social adjustment problems also have more personal adjustment problems.

Hypotheses

Hypotheses tested by Bhatt, 1969 and Murti, 1968 were as follows :

1. Early maturers show better adjustment than late maturers.
2. Subjects from lower socio-economic class face more adjustment problems than those from higher socio-economic class.
3. Girls from smaller families have less adjustment problems.

Method

Sample

The sample of Study 1 (Murti, 1968) consisted of 97 female, resident and non-resident students from the second year of the Faculty of Home Science, and of the age range 16-20 years. Majority of the subjects came from a higher socio-economic group. An average of 3-5 siblings were present in their families. The sample of Study 2 (Bhatt, 1969) consisted of 200 resident and non-resident students from the Faculty of Home Science and Preparatory Unit of Arts, and of the age range 15-20 years. They came from all socio-economic levels and from nuclear as well as joint families.

The sample of Study 3 (Bakshi, 1969) consisted of 80 girls and 80 boys of three different schools of Baroda. The age range was from 14-18 years, and the children belonged to all social classes, low to high.

Tool

A questionnaire was used for collecting data, the inventory for which, was originally formulated by N. Y. Reddy of Osmania University for his doctoral thesis. This inventory consisted of two parts. Part I consisted of questions related to the home background and problems related to physical growth and development. Part II consisted of 83 items related to personal and social adjustment. Each of these items had three alternative answers–' always ', ' sometimes ', and ' never '. The answers were scored on a three point rating scale. Study 1 (Murti, 1968) also utilized the Anxiety Inventory based on Taylor's Manifest Anxiety Scale. Sixty six items pertaining to home relationships, social relationships, and self concept were included. The subjects were asked to check against the items applicable/not applicable to them.

The variables included in the study were : age of menarche, socio-economic status, size of the family, number of siblings, and place of residence.

Procedure

The investigator visited the students at the respective schools/colleges and distributed the inventories. The need and purpose of the study was explained. Help was given whenever necessary to clarify doubts regarding the items.

Results

The major findings of the three studies may by summarized as follows :

1. The age of menarche did not seem to have any effect on the adjustment problems of the adolescents.
2. The relationship between problems related to menstruation and other physical/physiological problems and social-personal adjustment problems was evident in that, those who had many problems in one area also had problems in many others.
3. In terms of mean scores, subjects from the middle social class showed more adjustment problems than did subjects from the lower or higher middle class.

4. Girls face more problems related to 'neuroticism' and 'personal worth' while boys face more problems related to 'guilt feelings'.
5. There was no significant relationship between personal and social adjustment problems scores and academic performance, type and size of the family, ordinal position, and place of residence for the group as a whole. However, the study by Murti (1968) revealed that hostelites face more personal adjustment problems and show high anxiety scores.
6. In the age group 15-20 years (Bhatt, 1969) there is a significant positive correlation between adjustment problems and chronological age.
7. A positive correlation between personal adjustment problems and social adjustment problems is indicated in all three studies (Murti, 1968; Bhatt, 1969; and Bakshi, 1969).

Gohain, A. A Study of Some of the Factors Affecting Adjustment in Adolescent Girls with Specific Reference to Self-concept. 1971.

Varadpande, N. A Study of Some of the Factors Affecting the Self-concept of Adolescent Boys. 1971.

Kamat, K. A Study of Some Factors Affecting the Self-concept of Undergraduate Students in the Faculty of Home Science. 1971.

Who am I ? Every adolescent finds himself asking this question in a desparate attempt to establish his own identity. This search for self is an important aspect of the adolescent's personality. Self-concept can be defined as the individual's attitudes and feelings about self which can be either positive or negative depending upon the individual's personality. An individual's personality develops through interaction with the environment. Thus we can infer that self concept is influenced by environmental factors. The set of studies reported here were carried out to investigate the factors affecting the self-concept of adolescents.

Objective

1. To study the effect of certain factors, namely, age of menarche, physical and psychological changes at onset of puberty, academic achievement, family background, personal and social adjustment problems, on adolescent's self-concept.

Hypotheses

1. The adjustment problems of adolescents are likely to increase with an increase in the age of menarche.
2. There is a positive relationship between academic achievement and self concept and achievement motivation and self-concept.

3. Subjects from higher socio-economic status are likely to show positive self-concept.
4. Subjects showing accelerated development at the onset of puberty have a higher positive self-concept.
5. Subjects having more social and personal adjustment problems will have low self-concepts.
6. Interest shown by parents in their child is positively related to self-concept.
7. Number of friends is positively related to self-concept.

Method

Sample

The sample of Gohain's study (1971) consisted of 100 school going girls, from ninth and tenth grades, their age range being 13 to 19 years. The sample of Varadpande's study (1971) consisted of 100 school going boys, from ninth and tenth grades, between 13-18 years of age, from the income group of Rs. 50-1000 per month. The sample of Kamat's study, (1971) consisted of 195 under-graduate students of the Faculty of Home Science aged 17 to 21 years.

Tools

The tools used for collecting data included :

1. Self-concept inventory test to study the stability of self-concept.
2. Dr. V. N. Mukherjee sentence completion test to assess achievement motivation.
3. Kuppuswamy's socio-economic status scale for urban areas.
4. N. Y. Reddy's inventory to obtain background information, and information related to age of menarche, physical changes during puberty, personal, and social adjustment problems.
5. Rosenberg's inventory to assess perceived parental interest in their children.

Procedure

A pilot study was conducted in order to find out whether the subjects could understand the language used in the questionnaire, and determine how much time it would take to administer each questionnaire.

For the main study, the questionnaires were distributed in two sittings, of one hour each. The academic performance was judged by examining the academic records of the subjects. Self concept statements were scored along a 4 point scale, as highly positive, positive, negative, and highly negative.

Statistical measures such as mean, standard deviation, product moment correlation, and chi-square test were employed to see the relationship between self-concept and other factors.

Results

1. Academic achievement has a positive relationship with self-concept.
2. Achievement motivation has a positive relationship with self-concept.
3. Low socio-economic status is related to low self-concept.
4. There is no significant relationship between self-concept and problems related to physiological and psychological changes.
5. There is no significant relationship between age of menarche and high/low self-concept.

Other findings (Kamat, 1971)

1. Subjects having fewer siblings tend to have high self-concept and those having more siblings tend to have low self-concept.
2. When ordinal position and family size were considered together, it was observed that first and second born in small families tend to have higher self-concept whereas later born in large families tend to have lower self-concept.
3. Subjects having many friends tend to have a higher self-concept than those with few friends.
4. Active participation in extra-curricular activities has a positive relation with self-concept.

Pathak, P. Abridged Mental and Motor Scales of Bayley Scales of Infant Development (Research Form 1961). 1973.

Khokha, R. A Study of Substituting Indigenous Materials for BSID Materials for Testing some Selected Items from Abridged Mental Scales of BSID. 1974

Maheswari, S. Comparison of Scores on BSID and two Sets of Substitute Indigenous Material. 1979

The period of infancy comprises from birth to three years. According to Nancy Bayley (1969), developmental tests for infants differ from those designed for older individuals, In the child, during the first two years, the abilities under consideration do not array themselves into neat, concurrently developing 'factors' of mental or motor functions. The Bayley Scales of Infant Development are point scales consisting of 230 items, of which some are sequential and some are unitary. Consequently, testing a baby for motor and mental development on BSID becomes a long process of preparation and training. Testing a baby is also time consuming, approximately 40 minutes per child, especially for those who have to screen the babies for further treatment. Hence it was felt that a shorter scale which could be used without much elaborate preparation on the part of the tester and in a shorter time would be much more practical and useful.

Further the present studies were undertaken in order to attempt to substitute the scale items with indigenous materials.

Objectives

1. To select comparable indigenous materials to substitute BSID materials.
2. To examine differences, if any, in the performance of infants on the items selected from the BSID when a variety of materials are used.
3. To determine the most suitable set of indigenous material tested for substitution in the Bayley Scales.
4. To decide upon the basis of performance of the infants whether indigenous materials can be substituted for the BSID materials.

Method

Sample

The sample consisted of 138 infants from 3 to 30 months. These infants were selected randomly irrespective of the child's sex, ordinal position, socio-economic group, caste, religion, and locality.

Tool

Two sets of substitute indigenous materials were developed. From the Bayley Scale of Infant development, only those items which required the use of the standard Nancy Bayley kit material were used. For this, the materials for the BSID abridged mental scale were scrutinized. Twelve items were selected. For each selected item some indigenous materials were used. The selection of the materials was based on : (a) easy availability; (b) relatively inexpensive; and (c) similarity to the original Bayley material as far as feasible.

The difficulty order of each item was determined by Phatak (1973) on the basis of 50% of the Indian sample having passed each item at that particular age level.

Procedure

A pilot study was conducted on 10 infants between the age group 13-30 months to study the adaptability of the selected indigenous materials. The selected items and the materials purchased for the indigenous scale was thus used without alteration for the final measurement.

Each child was tested on all the three kits. An interval of 20-25 minutes was kept between administration of the two tests, and testing were carried out ± 3 days of the documented birth date. To ensure enough variability scales were administered in rotation. Testings were done in the presence of either parent. Individual child's performance on all three scales for each material was scrutinized.

Results

The results of the studies revealed that the performance of all the children on all the items was the same except in the item of cubes. It was found that children made tower of more cubes with indigenous materials than with BSID materials. When the tower of 6 cubes of BSID was compensated with a tower of more (7) indigenous cubes, it was found that this item was rebalanced. It was thus concluded that the selected materials of BSID could be substituted by the indigenous materials.

James, S. Application of the Phatak Draw-A-Man Scale to the Age Group of two and A Half Years to Six Years and Calculation of Tentative Norms. 1967.

Sase, A. Application of Draw-A-Man Test for Children of Three to Six Years Attending School in Baroda City. 1969.

Sharma, V. Application of Phatak's Draw-A-Man Test to Age Group 10 years Onwards. 1970.

The young child is very spontaneous and strives to express himself in various ways. Since he gains intense satisfaction from motor expression, dabbling with pencil and paper and putting down on paper the many impressions of the familiar objects in the environment becomes his favourite past time. This activity serves as an outlet for his pent-up emotions and desires. But as he grows older, he becomes dependent upon verbal communication and gives up the drawings.

Most psychologists are of the opinion that art, which is a means of free self-expression, covers a wide range of bodily activities and mental processes. So when the drawing test ceases to show increment, it ceases to be an index of the child's further growth in intellectual maturity. The present studies were designed to investigate the possibility of using the Phatak Draw-a-Man scale as a measure of intellectual maturity with children of various age groups as well as with adolescents. It was further hoped that this scale would fill in the need for a short and simple tool for measuring intelligence of children.

Objectives

1. To study the application of the Phatak's Draw-a-Man scale to children of various age groups as well as adolescents.
2. To investigate the validity, reliability, and objectivity of Phatak's Draw-a-Man scale as a measure of intelligence for the ages where it can be applied.
3. To calculate the tentative age norms for the age groups for which the scale is applicable.
4. To study the sex-differences in performance of boys and girls.

Method

Sample

The sample for study 1 (James, 1967) was drawn from five institutions in Baroda city having pre-primary section. The schools were randomly selected. The sample consisted of children whose ages ranged from 2½ years to 6½ years.

The sample for study 2 (Sase, 1969) consisted of 913 children—469 boys and 444 girls—from 30 institutions of Baroda city. Their ages ranged from 3 years to 6 years.

The sample for study 3 (Sharma, 1970) consisted of 1463 children above 10 years of age from 10 institutions of Baroda city.

Tool

In all three studies, Phatak's Draw-a-Man scale was used to measure intelligence. This tool which evolved out of Goodenough's Draw-a-Man test, was constructed in a way suitable to the Indian situation.

Phatak's Draw-a-Man scale consists of 21 points scored as follows : eyes ; nose ; ears ; hair and hat ; forehead ; chin ; mouth ; neck ; trunk ; arms ; fingers ; legs ; toes and feet ; motor co-ordination ; dress ; proportion head ; proportion arms ; proportion legs ; symmetry ; and general action or situation indicated.

Procedure

The Draw-a-Man test was administered under the standardized instructions, as given in the manual by Phatak. All drawings were made on standardized sheets. The use of erasers was reduced to a minimum. There was no time limit but usually no child continued to draw for more than thirty minutes. The drawing session, supervised by the investigator, was administered to three age groups namely 3½ years to 6½ years, 3 years to 6 years, and 10 years onwards. The investigator instructed the children to draw a picture of a full man in the blank space indicated.

The sheets were scored and the applicability of the scale was studied by (a) finding the number of scorable and unscorable drawings made by the subjects at each successive age level, and (b) by observing the age at which the predominance of drawings show some recognizable parts of the human figure. Data for boys and girls were treated separately. Th validity of the scale was measured against two criterion tests *viz* the Leiter International Performance scale and Teacher's rating of general intelligence (James, 1967); the G. B, Shah's non-verbal group test and Lele's verbal group test of intelligence (Sharma, 1970). The validity of study 2 (Sase, 1969) was tested by correlating the scores on Phatak scale with the scores of Goodenough scale (1926) and Goodenough-Harris, scale (1963).

The validity was then tested by simple measure scores for each of the major points at successive age groups. The reliability was judged by a test-retest method. Objectivity was measured by taking the coefficient of correlation between the scoring by different scorers.

Scoring

The drawings were classified according to the age groups and scored. Mean and S.D's were calculated for each group and 't' values were found out to see the differences between the means of successive age groups. Tentative norms for the ages for which the scale was applicable, were presented.

Results

The major findings of the project were :

1. The Phatak Draw-a-man scale can be successfully applied as an objective measure of intellectual maturity from four years of age to fifteen years of age.

2. Girls were found to be superior to boys in their performance on the scale, in study 1 (James, 1967) whereas in study 2 (Sase, 1969) no sex differences were observed for the age group four to six years. However, in study 3 (Sharma, 1970) in the age group 10 years to 16 years, sex differences were in favour of boys.

The validity of Phatak's scale was investigated by studying its correlation with other scales.

Validity : The scale has reasonable validity when correlated with teacher's ratings of pupil's intelligence and I.Q. on the Leiter International Performance scale (LIPs).

Validity of the Phatak Draw-a-Man scale against teacher's rating was +.43 (4½ years to 5½ years) to .65 (5½ years to 6½ years). Validity of the scale against LIPs was +.42 (4½ years to 5½ years) to +.73 (5½ years to 6½ years) (James, 1967). Validity of the Phatak's scale against Goodenough scale was +.89 and against Goodenough Harris scale was +.90 (Sase, 1969).

Validity of Phatak scale against G. B. Shah's test was +.46 and against Lele's test +.23 (Sharma, 1970).

Test Retest Reliability : The reliability of Phatak's scale as measured by test-retest method was .84 and .74 in James, 1967; and Sharma, 1970 respectively. This shows that the scale is reliable.

Inter-Scorer Agreement : Inter-scorer reliability ranged from +.86 to +.98 indicating that Phatak's Draw-a-Man scale can be used objectively as a measure of intelligence.

Jhinsi, N. Application of Koppitz Test to Human Figure Drawings of Indian Children. 1975.

A review of researches done on children's drawings as a measure of mental maturity and projective use of children's drawings, reveal two main approaches to the interpretation of human figure drawings. The first of these is a developmental approach, a test of mental maturity. The second approach is utilised by clinicians who regard human figure drawings as projective technique and who analyse drawings for signs of unconscious needs, conflicts, and personality traits. Koppitz identifies the use of human figure drawings as a valuable technique because it can be used both as developmental test as well as projective method.

Objectives

The present study was undertaken to study the application of Koppitz's two tests, namely, (a) Developmental test, and (b) Emotional indicators, to human figure drawings of Indian children. The specific objectives were :

1. To investigate whether developmental norms given by Koppitz for American children, also hold true for Indian children.
2. To make a critical study of emotional indicators shown in drawings of the children.

Method

Pilot study : This was undertaken with following objectives :

1. To get an idea of the incidence of emotional indicators, in order to decide the final sample.
2. To have practice in scoring the drawings.

Sample

Three hundred school going children of ages 7-12 years were chosen from three schools in Baroda city, Rosary High School, University Experimental School, and Baroda High School.

Tool

Koppitz Human Figure Drawing Test : A unique feature of Koppitz HFD Test is that it is used both as developmental test and as clinical diagnostic test. Koppitz believes that HFDS reflect the child's current stage of mental development as well as his attitudes and concerns.

Koppitz gives 30 signs on the HFDs which meet the criteria set up for developmental items drawn from Goodenough Harris Scoring system and Koppitz's own experience.

Emotional Indicators (EI) differ from Developmental Items, in that they are not primarily related to the child's age and maturation but reflect his anxieties, concerns, and attitudes. A list also of 30 signs consists of three different types of items : (a) quality signs e.g. broken or sketching lines, (b) special features e.g. tiny or large head, (c) omissions e.g. no eyes, no mouth, no legs.

Procedure

Ten to fifteen children were tested at a time, but were so arranged that they could not look into their neighbours drawings. A room least likely to be disturbed was selected, and it was made sure that no pictures of human figures were in the room. Prior permission to test the children was sought from the Principals and class teachers.

The following instructions were given to the children, " On this paper, I want you to draw a whole person; it can be any kind of person but make sure that it is a full picture ". For younger children the word ' person ' was explained as " you may draw a man, woman, boy or a girl ". On an average a group took 20-30 minutes to draw a human figure.

Scoring :

The total score on HFD is sum of the negative and positive scores for the absence and presence of expected and exceptional items in an HFD. To avoid negative scoring Koppitz has added a constant value of 5 to the sum of all positive and negative scores a child receives on his HFD. Thus the omission of one expected item was counted as $-1 + 5 = 4$; the presence of one exceptional item was counted as $+1 + 5 = 6$.

Results

1. A comparison of Koppitz and Phatak's scores showed that 85% children scored higher on Phatak's test.
2. A large number (53%) showed emotional indicators in their drawing.
3. Seven years seems to be the period of highest emotional disturbance.
4. A significantly higher number of boys showed emotional indicators than girls.
5. A critical study of nine cases showing two, four, and five indicators in their drawings was taken up. Out of these one was found emotionally disturbed and had already been referred to a psychiatrist; 5 cases showed some indications of emotional disturbance, but reliable clinical evidence was not available; and 3 cases showed no evidence of emotional disturbance.

Sundaresan, J. Adaptation of Kohlberg's Moral Judgement Test for Indian Children Eight to Twelve Years of Age. 1975.

Moral development has been generally defined as the internalization of moral values and rules of moral action from external imposition to internal acceptance of these rules.

There are basically two approaches to the developmental process of morality. One is the social learning approach in which the basic assumption is that internalization of moral standards occurs through the association and reinforcement learning in the process of socialization. The cognitive developmental approach which forms the theoretical base for the present study, involves the analysis of thought structures underlying the moral concepts of persons at different age levels, in order to define a general direction of developmental progression. Hence the clinical interview technique as used by Kohlberg in his Moral Judgement Test (1973) would seem most appropriate for use, as it facilitates obtaining data on the child's thinking, such that a given response is not merely determined by knowledge and familiarity with that task, rather it represents an underlying thought organization.

The present study was a part of an integrated project to study the moral judgement of Indian children using Kohlberg's Moral Judgement Test (1973) to assess morality levels, as well as provide additional cross-cultural evidence of the moral development stages. In view of the problems of comparability of research tools used in cross-cultural research, the focus of the present study was on the adaptation of KMJ Test (1973) for administration on Indian children 8 to 12 years of age.

Objectives

1. To study problems in administration and scoring of the KMJ Test (1973) on Indian children between 8 and 12 years of age.
2. To suggest the necessary adaptation of the test on the analysis of problems in the administration and scoring of the KMJ Test.

Method

Sample

The sample consisted of 100 boys from middle and upper social class backgrounds between the ages 8 to 12 years. There were 20 subjects in each of the age groups of 8, 9, 10, 11, and 12 years.

Tool

The tool used for the present study was Kohlberg's Moral Judgement Test (1973). The Test consists of two forms, A and B, each form consisting of three stories, each presenting a hypothetical moral dilemma, in which acts of obedience to laws, rules or commands of authority conflict with the needs or welfare of other persons. Each story is followed by a set of questions. First the subject is asked to choose whether one should perform the obedience-serving act or the need-serving act and then the subject responds to a series of questions, which probe into the reasoning underlying his choice of action.

Procedure

Each subject was interviewed individually at his home. Each complete interview, *i.e.* of all the six stories in Kohlberg's Moral Judgement Test (1973), was completed in two or three sessions, covering two or three stories respectively, depending on the attention and interest of the subject. Background information such as the subject's personal data, like name, age, class, birth, family background data like type of family, income, father's education and occupation, etc. was obtained during the first session.

Before beginning, the investigator told the subjects about the interview, in a conversational tone. The stories were then narrated to the subject one by one. The subject was consistently asked if he understood the story and encouraged to say so if he did not. The subject's name and number of interview session was recorded by the investigator. The taped interviews were transcribed verbatim.

Results

A descriptive analysis of problems in tool administration and the scoring procedure was done. Problems in tool administration were mainly centered around : (a) difficulty on the Part of the subjects in comprehension of the story and questions, due to lack of comprehension of the language used for difficult concepts; and (b) lack of adequate and appropriate use of probes by the interviewers.

Problems in scoring centered around, the inadequacy of the scoring manual (1973) as a rigid structural criterion and the subjectivity of scoring.

Based on the analysis of problems in tool administration the following recommendations were outlined for the KMJ Test :

1. Names of the story characters and three of the story situations were changed to suit the Indian cultural context.

2. The language of the story and the questions were simplified and the questions were elaborated for clarification.

3. Explanations for difficult concepts were incorporated along with the questions.

4. A list of probes found effective were included along with each question.

5. In order to verify whether Form A and B can be used as equivalent or alternate forms of the moral judgement test, correlation between scores on Form A and B was calculated. The obtained correlation was .63, hence not high enough to justify alternative use of the Forms, it was thus recommended that both the Forms needed to be equated before use of either one alone could be justified.

6. To reduce subjectivity of scoring it was recommended that interscorer reliability should be calculated, by correlation of moral judgement quotients, calculated from the scores given by two independent scorers.

II. MARRIAGE AND FAMILY RELATIONS

A. Preparation for Marriage

B. Adjustment in Marriage and Family Relations

C. Resource Materials Kit : Marriage and Family Studies

D. Child-Rearing Practices and Education for Mother Craft

E. Understanding Children and Families in their Ecological Setting

(a) Tribal ; (b) Urban poor.

Virk, S. Opinions of Youth on the need for Preparation for Marriage. 1976.

This study was undertaken to find out the opinions of youth on the need for preparation for marriage, with special reference to need for pre-marital counselling services and marriage education.

Objectives

1. To study the general trends in opinions of youth regarding :
   a. importance of marriage with regard to its meaning and necessity ;
   b. the need for preparation for marriage ;
   c. the methods of preparation for marriage ;
   d. the need and importance of pre-marital counselling as preparation for marriage ;
   e. the need and importance of marriage education in schools and colleges as preparation for marriage.
2. To study the sex differences, if any, in the opinions regarding the above mentioned areas.
3. To suggest modifications, if any, for the course on Marriage and Family Relations, offered by the Faculty of Home Science, M. S. University, Baroda.

Method

Sample

The sample consisted of 160 students between the ages of 18-21 years from M. S. University of Baroda. There were 20 boys and 20 girls in each age group of 18 years, 19 years, 20 years, and 21 years. Only unmarried students were included. The purposive method of sampling was used. The two criteria for sample selection were sex and age.

Tool

A close-ended questionnaire was prepared by the investigator in consultation with experts from the fields of sociology, psychology, social work, and child development. The questionnaire consisted of two parts. The first part related to background information of the respondents and second to the opinions of youth regarding the need for preparation for marriage. The latter consisted of 15 questions, covering the following aspects : (a) importance of marriage-its meaning and necessity; (b) need for preparation for marriage; (c) methods of preparation; (d) importance of pre-marital counselling, and preparation for marriage; (e) importance of marriage education in schools and colleges as preparation for marriage.

Data Analysis

The responses to different questions were tabulated separately for 1st, 2nd, and 3rd preferences. The data were analysed to study (a) general trends in opinion of youth, and (b) sex differences in the opinions.

Results

Importance of Marriage—its Meaning and Necessity

1. Marriage was viewed as a life long companionship by majority of the sample, though more girls than boys subscribed to this view. This was followed with a view of marriage as an intimate relationship and bond for personal happiness.

2. A large majority (92.5%) of the respondents felt that marriage was necessary for both girls and boys. Boys felt that ' to love and to be loved ' was the most important reason whereas girls laid greater emphasis on ' companionship '. ' Sexual attraction ' rated third for both boys and girls.

3. The most important reasons given for boys getting married were, ' to love and be loved ', ' companionship ', and ' sexual attraction '. The boys felt that reasons for girls getting married were, ' social security ', ' social prestige ', and ' fulfilling need for married life '. More boys gave these reasons than girls did for themselves.

4. Most girls felt that boys married for ' sexual satisfaction ' and ' continuing the race '.

5. A small minority of respodents felt that marriage was not necessary for boys and girls, 6.25% girls and 1.25% boys subscribed to this view.

6. The reasons given for marriage not being necessary were that ' it entailed too many responsibilities ' ' loss of freedom ', and ' loss of individuality '.

Need for Preparation for Marriage

1. Majority of respondents felt that preparation for marriage was necessary. The reasons being, ' to select a marriage partner ', ' to understand what marriage involves ', and ' to have better adjustments in marriage '.

2. The reasons given by a few respondents for preparation for marriage not being necessary were, ' adjustments come naturally ' and ' knowing too much in advance may itself lead to conflicts '.

Methods of Preparation

1. ' Developing a mature personality which would lead to happiness ' was stated as the most important method of preparation. This view was held by more girls than boys. Boys laid greater emphasis on ' knowing the marriage partner ' and ' getting to know and understand members of opposite sex ' as methods of preparation for marriage.

Importance of Pre-marital Counselling and Preparation for Marriage

1. Almost 75% of the respondents who felt preparation was necessary, knew the meaning of pre-marital counselling. Higher percentage of girls than boys were aware of it.

2. More than half of the respondents felt that counselling should be sought 'only if one has problems'.

3. Nearly 35% of respondents considered counselling necessary, 'to know what marriage is' and 'what is expected in marriage'. More girls felt this need than boys.

4. 'Marriage adjustment' and 'medical consultation' were areas where counselling was felt necessary, 'only if one had problems'.

Importance of Marriage Education in Schools and Colleges as Preparation for Marriage

1. A large majority of respondents opted for marriage education because they felt that though parents were desired sources of information very few parents fulfil the need.

2. The important reasons given for marriage education were 'to get reliable information on sex and related matters' and 'to develop mature attitudes towards marriage'.

3. In the opinion of the respondents marriage education should be given at both high school and college level, and cover areas such as importance of marriage' and 'selection of a marriage partner'.

Cherian, M. Attitude towards Dowry of College Students Representing Syrian Christian Denominations in Kerala State, 1963.

This research focuses on finding the attitude towards dowry in three Syrian Christian denominations in Kerala State. Though the forms of and attitudes towards dowry have varied from time to time, and society to society, the practice has existed for long. The exchange of material goods and services termed as dowry was in some cases from the bridegrooms' party to the brides' party or from the brides' to the bridegrooms' in others. This research concentrates on the latter type of exchange termed as 'Streedhanam' i.e. the portion of land or its equivalent in material goods from her father's property, is transferred to the bride's name on marriage.

Objectives

1. To find the differences between boys and girls in their attitudes towards dowry system.
2. To find possible relationships between students' attitudes on the several variable like motives underlying the giving and the taking of dowry in the

selection of marriage partner, and variables such as church denomination, type and size of family, and other background variables such as education, income and so on.

Method

Sample

The sample consisted of 90 second year and third year college students (1963) of Kerala. All of them were Syrian Christians. Out of the total sample of 90 students, 48 were boys and 42 were girls. They were all unmarried and from various residential background i.e. villages, towns, as well as cities. Out of the 90 students 69 belonged to the nuclear families and the remaining 21 to joint families. They were from various socio-economic classes. This was a heterogeneous group which represented the student population of Kerala.

Tool

The tool used for gathering the required data, was a questionnaire. It was prepared on the basis of preliminary interviews. The questionnaire consisted of four parts. The first part consisted of the background factors such as : age ; church denomination ; residence (city, town, or village) ; type of family (joint or nuclear) ; number of children ; number of daughters ; number of sons ; father's education ; mother's education ; boy's educational status ; girl's educational status ; parent's income ; sister's dowry ; brother's share in the total amount ; expected social status of future spouse's family ; percentage of mothers who received dowry and in what amount ; possible patterns for selecting a marriage partner ; and students' opinion about ideal way of selecting a marriage partner. The second part asked direct questions regarding their own future marriage and dowry. The third part consisted of an inventory of attitudes towards dowry system. This consisted of 75 statements concerning dowry. (Three persons had read through the 75 statements and classified them as positive, negative, or neutral as related to dowry). The fourth part of the questionnaire consisted of a 4 point rating scale which was provided in the inventory to indicate the strength of opinion about each statement. At the end of the rating scale the student was asked to write any other opinions he /she might have about dowry system.

Procedure

The three denominations of the Syrian Church, chosen for the study, hold conferences for their own students during summer holidays. It was decided that, part of the data should be collected at this time as it was convenient to get the desired sample in groups. Data from the remaining subjects was collected individually or in small groups in college hostels, college premises, or subject's homes.

The students who were to answer the questionnaires were taken to a separate room to avoid distractions. The purpose of the study was briefly explained and the instruction given at the beginning of each major question was brought to subjects' notice.

Analysis

For analysing the data, the items in the questionnaire were rated, scored, and the frequency distributions were found. The sample of boys and girls were divided according to the computed standard deviations. There were ten half standard deviations, which were ten groups, indicating extreme negative or positive attitudes. These attitudes were then correlated with certain variablss such as age, type of residence, parent's education, etc, to find possible relationships. In addition to this, the percentage of all statements in the attitude scales were calculated.

1. Many of the girls (62.5%) from the joint families tended to favour dowry whereas majority (58.4%) from unitary families were opposed to it. This might mean that the joint families tended to hold on to old customs more than unitary families.

2. A large majority of sons of college educated fathers (83%), and daughters of college educated mothers (90%) opposed dowry system. The children of school educated parents, mostly favoured this custom. It is possible that when parents are well educated they become liberal in their attitudes towards dowry, as do their children.

3. Boys seemed to have more liberty in the selection of marriage partner than did the girls in this community. Out of the 48 boys and 42 girls, 4.2% boys and 4.8%girls said that their parents would choose partners for them without consulting them; 45.8% boys and 76.1% girls reported that their parents would choose partners after consulting them; 41.7% boys and 14.3% girls answered that they would choose their partners with the help of the parents; while 8.3% boys and none of the girls answered that they would select marriage partners by themselves.

4. There was a difference of opinion between boys and girls about the ideal way of selecting a marriage partner. The boys felt that they should have more responsibility in the matter whereas the girls felt that their parents should have more responsibility in finding a partner. No boy and 2.4% girls said that parents should arrange the marriage by themselves, while 45.8% boys and 76.2% girls were of the view that parents must do it after consulting them. More boys (47.9%) than girls (21.4%) answered that they should choose their partners with the help of parents, while 4.2% boys and none of the girls thought that they should choose on their own.

5 Many boys (67.6%) reported that they would not accept dowry from their brides. Not one of the girls said that she would not take dowry from her father. This indicated that boys had some freedom to decide whether or not to accept dowry. Girls did not decide for themselves as it would be the boy's family who make the decision.

6. With reference to the proprietorship of dowry, 44% indicated that the person who received the dowry on behalf of the bride had some financial gain, 60% of them thought of dowry as the absolute property of the bride, but 55% among boys and girls disagreed with the statement that the bride should have full authority over the money. Eighty percent of boys and 62% girls reported that after giving dowry, the husband's family took all responsibility of the girl.

7. The amount of dowry received by the parent generation was significantly less than the amount expected by their sons and daughters. Of the 90 mothers, 20 mothers (22.2%) received a dowry of less than Rs. 3000, 10 mothers (11.0%) received between Rs. 3000 to 10,000, and none of the mothers received above Rs. 10,000. Sixty mothers (66.8%) did not answer the question. In the case of children, 2.4% boys and 2.4% girls expected dowry less than Rs. 3000, 24.9% boys and 61.9% girls expected between Rs. 3000 to Rs. 10,000, 8.4% boys and 16.7% girls expected between Rs. 10,000 to Rs. 25,000.

Medora, N. Opinions of Youth Regarding Sex. 1975

Objective

The main objective was to study the influence of (a) age, and (b) sex on the opinions of M. S. University youth regarding the following dimensions of sexual behaviour, namely, sex education, pre-marital sex extra marital sex, and sex adjustment in marriage

Method

Sample

The sample consisted of 80 boys and 80 girls, 18 and 21 years of age from three colleges of the M. S. University of Baroda, *viz.* Home Science, Technology, and Commerce. Home Science and Technology represented non co-educational faculties and Commerce a co-educational one.

Tool

A questionnaire was constructed by the investigator and comprised of 21 questions. Experts from various related fields were consulted before the finalization of the tool. The first part of the questionnaire consisted of questions whereby background information was obtained. Part II consisted of four sections dealing with, (a) sex education, (b) pre-marital sex, (c) extra-marital sex, and (d) sex adjustment in marriage. For a few questions the respondents had to answer 'yes' and 'no', and in some others 'agree', 'no opinion ' and ' disagree '. In certain questions where there were sub-units if subjects agreed with many or most of the statements they were asked to rank the three most important statements.

Procedure

Students from the three faculties were contacted in their respective faculties. The questionnaire was given and collected within half an hour to prevent discussion between the respondents.

Plan of Analysis

The frequencies and percentages for each of the 21 questions were calculated, tabulated, and comparisons were made.

Results

Sex Education

1. A high percentage (95%) of the 21 year olds expressed the opinion that all schools must have sex education as a compulsory subject. More girls (96%) than boys (87.5%) expressed this opinion.

2. There are no clear age and sex differences regarding the main objectives of sex education i.e. (a) preventing conflicts, doubts, and false notions about sex, and (b) helping the individual make proper and healthy heterosexual adjustment. The sources found ideal for information regarding sex were parents and schools. But parents were among the least cited sources from whom information on sex had been obtained.

Pre-marital sex

1. The 18 year olds seem to be more permissive than 21 year olds regarding the acceptance of various levels of physical intimacies. Boys are more permissive than girls in accepting holding hands, kissing, necking, petting, and intercourse before marriage.

2. A little more than half of 18 and 21 year olds agreed that more sexual freedom should be given to boys than to girls. A higher percentage of boys expressed this view. Others disagreed with the above statement. A slightly higher percent of 21 year olds than 18 year olds disagreed with the statement that it was possible for an individual to have a number of sexual affairs before marriage and still be faithful, loyal, and true to the person he/she marries. More girls than boys expressed this viewpoint.

3. No differences in opinions were found between 18 and 21 year olds regarding the main reasons for indulging and refraining from pre-marital sex. Girls considered ' to satisfy sexual desire ' and ' to express love and anticipate marriage with partner ' as important motives for an individual wanting to indulge in pre-marital sex. Boys considered ' uncontrollable heavy petting leading to intercourse and ' to express love and anticipate marriage with partner ' as main

reasons for indulging in sex. No sex differences were found in the reasons mentioned for not indulging in pre-marital sex.

Extra Marital Sex

1. Both the 18 and 21 year olds considered extra marital sex when an individual had an impotent/frigid husband/wife. Further 18 year olds justified extra marital sex if one happens to fall in love with another person. More girls subscribed to this view than boys. The 21 year olds justified sex outside of marriage when sex satisfaction could not be attained with partner.

Sex Adjustment in Marriage

1. When asked what were the important problems affecting sex adjustment in marriage, the youth mentioned ' absolute indifference shown by one partner ' and ' any wrong notions about sex ' as being significant problems affecting sex adjustment in marriage. More boys than girls subscribed to this view point, whereas girls considered ' lack of adequate information about sex ' and ' male trying to satisfy his sexual desire ' as being contributing factors.

2. Both 18 and 21 year old youth (boys and girls) expressed the opinion that important reasons for an individual not liking to have sex relations with one's partner may be either an impotent/frigid husband/wife, or because of disgust with sex. Further, according to girls, an individual may not like to have sex relations with one's partner because of ' fear of pain in the initial intercourse. ' Boys considered ' unattractiveness of partner ' as an important reason.

3. The 18 year olds considered discussing the issue with the partner before seeking guidance from an outside expert, whereas 21 year olds preferred to go to a physician first and then discuss with the partner, as proving to be helpful to a couple who have difficulty in sex adjustment in marriage.

4. There is agreement between 18 and 21 year olds regarding the most important conditions by which a couple can have proper and absolute sex adjustment in marriage, these being, mood, and no other worry or tension. Both boys and girls considered ' having the same desire for frequency of intercourse ' and ' consenting to have sex relations even when one is not in mood for it ' as major factors that could contribute in improving sex adjustment. Boys further added being absolutely free of tension as a major criteria helping in having satisfactory sex relations.

Raheja, S. Opinions of M. S. University Students Regarding the Selection of the Marriage Partner. 1978

The aim of the present study was to find out the opinions of youth regarding the various factors to be considered while selecting a marriage partner and the reasons for the same.

Objectives

1. To find out the general trends in the opinions of M. S. University students regarding :
   a. the type of choice preferred ;
   b. different factors considered while choosing a marriage partner ;
   c. the most emphasized factors in mate selection and reasons for the same ;
   d. importance of characteristics related to socio-cultural factors like, religion, caste, socio-economic status, education of parents, type of family, and dowry ;
   e. importance of characteristics related to personality of the individual like physical appearance, health, intelligence, education, personal qualities, maturity, and values related to sex ;
   f. suitable age for marriage.
2. To find out sex differences, if any, in the above mentioned areas.
3. To suggest modifications, if any, for the course on Marriage and Family, being offered at the Faculty of Home Science, M. S. University of Baroda.

Method

The study was of an exploratory and descriptive nature. Opinions of M. S. University students were taken regarding : (a) How to choose the marriage partner, (b) What are the various factors to be considered while selecting the marriage partner, and (c) What are the most emphasized factors.

Sample

The sample was purposively chosen and consisted of 50 college students, equal number of boys and girls, of the ages 18, 19, 20 and 21 years. All were unmarried students and had not attended any course on marriage previously.

Tool

The investigator constructed the tool for the study. Experts from related fields were asked to comment on (a) content and its relevance to the objectives of the study, (b) clarity and suitability of interview schedule, and (c) the rating used.

The final interview schedule consisted of two parts. The first part to obtain background information on the respondent and the second part to elicit the subjects' opinion on the topic of selection of marriage partners. The latter consisted of 16 questions covering the type of selection and factors considered while selecting a marriage partner (i.e. factors related to socio-cultural background and factors related to personality of the individual).

In each question the respondents were asked to give their preferences for different factors in order of importance and reasons for choices made.

Procedure

Interviews of all respondents were tape recorded. Verbatim transcription of all recorded interviews were done.

Data Analysis

The answer of all respondents were categorized based on preference. Further scoring was done to find out: (a) the importance placed on different factors considered while selecting the marriage partner and reasons for it; (b) sex differences, if any.

Results

Type of Selection

1. 'Personal selection' was considered the most preferred way of selecting one's partner (60% boys and 40% girls). The youth felt that one should take the responsibility for one's decision. The next preferred way of selecting one's partner was with the consent of parents, as it was opined that there would be no cause for unpleasantness if everybody was happy with the choice.

2. Most respondents emphasized the need to interact with the likely partner before deciding, to 'gain better understanding of persons' behaviour, values etc and to make a better choice'.

3. More boys opted for personal selection and more girls preferred selection of the partner with parents consent,

Socio-Cultural Factors

1. Seventy two per cent boys and 68% girls expressed the need to consider family background in terms of 'socio-economic status', 'education and profession of parents', and 'relations among the family members'. as it helps in adjustment by 'broadening one's outlook'.

2. About 25% of the respondents felt that family background was not important because one is only concerned with the marriage partner.

3. 'Caste and religion' were not considered important by 64% boys and 44% girls; a majority felt that the caste can be different, but religion should be the same.

4. Ninety two percent boys and 96% girls were against dowry system, because 'it is a burden on the girls parents', 'it is like selling and buying', and 'it is a social evil'.

Personality Characteristics

1. A higher percentage of boys than girls emphasized the importance of physical appearance while selecting a partner. That a 'boy should be taller than the girl, and have a 'good personality' were the characteristics most desired by both boys and girls. The reasons given for these were 'to avoid a

complex', and 'it is necessary to be attractive'. More girls (40%) than boys (25%) felt that physical appearance is not important if the person is otherwise suitable.

2 A large majority of responderts considered good health of the partner as important, 'to enjoy life fully' and 'to carry out one's activities without other's help'. The former reason was stated more by girls whereas the latter by boys.

3. 'Honesty' was rated the highest desired personal quality, followed by 'understanding nature' 'faithfulness', and 'sincerity'. These were felt to be the basic qualities needed for understanding between the partners.

4. 'Intelligence' was considered important for reasons like, 'to learn', 'to communicate,' and 'to know the world'. 'Common sense' 'presence of mind', and 'practicability' were considered to be the determining components of intelligence. "Being well read" was considered as important only by girls.

5. All respondents expressed the need for an educated partner, 'to have better mental communication', 'it broadens one's outlook', and 'increases knowledge'. Most of the respondents felt that the boy should be more educated than the girl as 'he should be superior to the girl' and 'be able to guide the girl.' A majority of them cited 'post graduation' and 'graduation' a minimum level for boys and girls respectively.

6. Eighty four percent boys emphasized only specialized field of education for boys and girls, whereas girls (36%) preferred technical education for boys.

7. 'Maturity' was considered one of the important factors in the partner by all respondents. 'Independent thinking,' 'mature behaviour,' and 'good decision making' were the three highly ranked maturity factors. The reasons for need for maturity were, 'to carry out one's responsibility,' 'to promote understanding' and 'to work and think independently.'

8. A higher percentage of girls (76%) than boys (52%) were against premarital sex relations owing to reasons like 'personal values and social norms'. Forty eight percent boys and 24% girls were in favor of premarital sex relationship, as it is a 'natural phenomenon,' and 'a way of expression of love' though it should only be with the future partner.

Age at Marriage

1. Nearly half of the respondents stated that 22 to 26 years were the ideal age for marriage of a girl and boy. A higher percentage of girls (60%) preferred 26 to 30 years as appropriate age for boys, whereas boys themselves preferred 22 to 26 years. The main reasons given were, 'one finishes one's study', and 'is nature enough to live independently'.

2. Two to five years was considered an ideal age gap by 56% boys and 44% girls. 'Boys should be more mature and experienced so that girls can depend on him,' girls mature earlier than boys', and 'it is conventional' were the reasons stated to justify the age gap. Twenty four percent of boys and girls stated 'no belief in age gap'. More girls opted for a greater age gap than boys.

When asked for the three most important factors while selecting the partner. personal qualities, education, and intelligence, were ranked first, second, and third respectively. These factors they felt were favourable in contributing to marital happiness. Girls emphasized the need for maturity, whereas boys emphasized family background.

Sharma, A. Opinions of Married Couples Regarding the Selection of Marriage Partner : A Study of Couples Residing in Baroda 1978

Objectives

1. To study the general trend in the opinions of married couples regarding the following factors to be considered in selection of a marriage partner :
   a. Importance of characteristics related to socio-cultural background (religion and caste, family background, socio-economic status, and dowry);
   b. Importance of characteristics related to personality (physical appearnce, health, education, intelligence, and personal qualities);
   c. Suitable age for marriage;
   d. Type of choice that is preferred in selection;
   e. Views regarding permissibility of pre-marital sex-relation in selection of marriage partner.
2. To study which are the most emphasized factors in selection of marriage partner and reasons for the same.
3. To study differences if any, in the opinions of husbands and wives, in the above mentioned areas.
4. To suggest modifications, if any, in the course on 'Marriage and Family' offered in the Faculty of Home Science, M. S. University of Baroda.

Method

Sample

The sample was purposively chosen from different localities of Baroda city. The sample consisted of 25 married couples, with the age of husbands ranging from 27 to 32 years and that of wives from 22 to 27 years. The couples who had been married for 2 to 7 years were included.

The final sample had following characteristics : (a) mean age for husbands was 29½ years and wives 25½ years, (b) mean marital experience–4½ years, (c) educational level for majority of respondents, both husbands and wives–B.A. or B.Sc., (d) income range Rs. 1000-1600, and (e) two thirds of female sample were house wives and one third were working women.

Procedure

A questionaire was formulated to elicit opinion regarding various factors to be considered while selecting a marriage partner. The questionnaire was sent to experts in various related fields to assess the content, relevance, clarity, and the suitability of the questionnaire.

Tool

The open ended, broadly structured interview schedule included two parts. The first part was used to collect background information and second part consisted of questions to elicit opinions regarding selection of marriage partner. The latter elicited opinions in the following areas, namely, (a) type of choice preferred in selection of marriage partner and procedure of selection, (b) suitable age for marriage, (c) important characteristics related to socio-cultural background, (d) important personality variables emphasized in selecting marriage partner, and (e) opinion regarding pre-marital sex-relationship.

Data Collection

Interviews of both husband and wife were tape recorded separately at different times.

Data Analysis

The data were analysed to find out : (a) importance placed on different factors considered while selecting a marriage partner and reasons for the same, and (b) sex differences in the opinions.

The data were analysed and responses to different questions were coded separately for 1st, 2nd, and 3rd preferences. The frequency of responses to each question were converted to percentages.

Results

Choice of Marriage Partner

1. Majority of respondents (64%) felt that the main selection should be that of the individual with the consent of parents. Parents are viewed as being more experienced and hence could provide more reliable and suggestive information regarding future partner. Husbands were more in favour of this view than wives.

2. The respondents emphasized the importance of meeting and interaction with future partner (88%) ; this was felt necessary for exchanging views, ideas, and knowing about the behaviour and nature of the person. Only a few (8%) husbands expressed that meeting is not essential because it does not help in knowing the nature of the person.

Age at Marriage

1. Majority of respondents preferred 20 to 25 years age range for a girl as she is supposed to be mature by then and 25 to 30 years for boys so that he is settled in his job.

2. Eighty percent of respondents cited the importance of the girl being younger than the boy by one year to five years. This they felt helps in better adjustment.

3. Maturity was considered to be important by all respondents. The most cited determinants of maturity were independent thinking for both boys and girls, as 'it helps in guiding one's children'. 'Emotionally balanced' was the next most mentioned factor, as it helps in avoiding quarrels and behaviour problems.

Socio-Cultural Factors

1. Similar caste and religion of both girl and boy was considered important by majority (72%) of respondents, for better family life adjustment. Only 20% husbands felt that caste and religion do not matter because more depends upon the person's ability to adjust.

2. Hundred percent of the respondents expressed that family background is important. The most opted factors for selecting a boy is his socio-economic status and cultural background of his family. This it was felt helps in better financial adjustment and the nature of a boy is reflected by his culture. For a girl 74% respondents cited the importance of considering the family background as important for adjustment with in-laws.

3. Sixty six percent of respondents emphasized that the socio-economic background should be same for both the partners or the girl could be from lower socio-economic status as it helps in better financial adjustment. Only 4% felt that socio-economic status was not important because adjustment was more dependent on individual's ability to adjust. More wives than husbands accorded importance to similarity of background.

Personal Characteristics

1. Education was considered an important factor by 100% of the respondents. Minimum level of education necessary for boys was opined as graduation and for girls matric or S. S. C. The reasons given for this were that it helps the boy in getting employment and it helps the girls in teaching and guiding one's children.

2. Majority (72%) of the respondents were of the opinion that both the partners should be equally educated or the girl less educated, for facilitating adjustment and avoiding quarrels. Fourteen percent felt that girls should be less educated as it helps adjustment by avoiding feelings of competition.

3. Husbands emphasized more than wives did that 'field of education' should be different as it helps to have wide variety of interests and 'it helps in learning from each other'.

4. Intelligence was also cited by 100% of the respondents as an important characteristic. Most important factors in intelligence for a boy were 'presence of mind', 'intelligent decision-making', and 'efficiency in one's job'. Most cited factors for a girl were 'efficiency in household work', 'problem solving', and 'intelligent decision making'. The reasons given were 'it helps in solving problems intelligently', 'maintaining social relations' and 'tackling household problems'.

5. Physical appearance was also stated as being important by all the respondents. The characteristics listed as most important for both boys and girls were, 'general appearance', 'height', and 'features'. The reasons for emphasizing these characteristics were: 'it gives them respect in the society', followed by 'it is a tradition that the boy be taller than the girl' and lastly 'good features create liking for each other'.

6. Health was also considered important by majority of respondents while selecting a boy or a girl, as it helps in 'achieving better sexual adjustment' and 'it prevents hereditary diseases from carrying over to next generation.' Only very few felt that health is not important as one cannot judge by looking at physical stature alone.

7. Majority of respondents cited patience, tolerance, considerateness, kindness, sympathy, understanding, and politeness as important personal qualities for a boy and a girl. These they felt helped in achieving better adjustment and in bringing up children. Wives cited 'patience and tolerance' as important for a boy.

Dowry

Majority of respondents felt that dowry should not be taken as it emphasizes more value for money than the person. More husbands than wives were in favour of taking dowry if the girls parents are willing to give, as it provides satisfaction to the boy and it facilitates girls adjustments with the in-laws.

Pre-marital Relationship

Views regarding pre-marital sex relationship reveal that majority are not in favour of permitting pre-marital sex relation before selection of marriage partner, because it results in bad reputation for the girl and as it is not acceptable by the society.

Goel, U. Opinions of M.S. University Students on Engagement as Prelude to Marriage. 1977.

The aim of this study was to find out whether in the opinion of students engagement period serves as preparation in terms of knowing and understanding the partner before marriage.

Objectives

1. To find out the opinions of youth regarding the concept of engagement.
2. To find out the opinion of youth on,
    - a. importance of engagement period in marital preparation ;
    - b. the ideal length of engagement ;
    - c. kinds of activities to be engaged in during engagement period ;
    - d. importance of family interaction during engagement period ;
    - e. appropriateness of breaking engagement.
3. To find out sex differences in opinions in the above mentioned areas.
4. To suggest modifications for the course on Marriage and Family Relations offered in the Faculty of Home Science, M. S. University of Baroda.

Method

The study was of an exploratory and descriptive nature.

Sample

The sample consisted of 160 unmarried students between the ages of 18 to 21 years. Eighty boys and 80 girls from different Faculties of M. S. University were selected on basis of age and sex.

Tool

A structured close-ended questionnaire was constructed by the investigator. Experts from various related fields were asked to comment on the clarity, content, and suitability of the questionnaire.

The final questionnaire schedule consisted of two parts. The first part was used to collect opinions of youth on the topic and second part to collect background information. Within each area, there were several questions, with series of multiple choice answers. The respondents were required to give upto three choices and rate them in order of importance.

Data Analysis

The data were analysed to study : (a) general trend in opinions of youth, (b) sex differences in the opinions.

Results

1. *Concept of Engagement*

Engagement was considered as 'period for better understanding between the couple' by 59% of respondents. This was followed by engagement being viewed as a 'formal announcement' of a future event.

2. *Importance of Engagement*

A large majority (83%) felt the need for engagement period as preparation for marriage. More girls than boys felt so. The most cited reason in favour of an engagement period was ' to give the individuals some time to know and understand each other before taking the final step '. The reason least cited was ' it provides time for shopping and preparing trousseau '.

A small percentage (17%) felt that an engagement period was not necessary prior to marriage, the reason being that it is just a formality. Most boys felt so

3. *Decisions to be Made During Engagement Period*

The most important decisions to be made during this period, as opined by a large proportion of the sample were, ' ways of adjusting to each other ' and ' type of future family to be established '.

4. *Pattern and Frequency of Meetings*

A majority of respondents opined for ' a convenient pattern of meeting that suits each other ', followed by a few who felt that the couple ' should meet in privacy only '. The least cited pattern was ' should meet in a group of family and friends '. A minority of students felt that the couple ' should meet everyday '.

5. *Activities During Engagement*

A majority (71%) felt that the activities during engagement period should promote and ' help in understanding each other ' and ' should go to places where they can relax and talk '.

6. *Revealing the Past*

A large proportion of those who felt the need for engagement period felt that, ' matters that might affect future family life ', ' family background ', ' debts and imprisonment ', should be talked over and revealed during the engagement period. Those who did not favor revealing the past said that ' it might cause misunderstanding ' and ' should forget the past as only future is important. '

7. *Family Interaction During Engagement*

The youth in general opined that the couple should know about the ' economic condition ' and ' type of family ' of the partner's family. Boys laid greater emphasis on economic conditions, whereas girls laid more importance on family members.

The need to know the partner's family, was considered necessary for the partners to feel more comfortable in their relationship and ' to provide an opportunity to adjust better to the partner's family '.

8. *Length of Engagement Period*

The most acceptable period of engagement indicated by the sample was between '2 to 4' and '5 to 8' months. Only a small minority favored engagement period of more than 2 years.

9. *Breaking up of Engagement*

A large majority (77%) of those who felt that engagement period was necessary, also felt the appropriateness of breaking the engagement, 'when love and respect are no longer there' and 'when one partner does not agree for marriage'. The latter reason was cited more by boys than girls whereas girls cited the former reason for breaking the engagement.

Mathew, A. Areas of Marital Adjustment for Indian Women in the Early Years of Married Life. 1964

The industrial, political and social events of the last few decades which rocked our country, have brought about tremendous changes in the people's attitude to, and outlook on, many aspects of life. Yet, there are sentiments which have been least affected by them. Attitudes towards marriage can be included in this category. Even today, the ultimate aim of every Indian girl is to get married. An unmarried girl in our country is, and always has been, looked upon with pity. It is only through marriage that she gets social approval to realize the all-important goal of her life, namely, motherhood. Marriage thus marks the beginning of the most vital social institution the Family.

What actually awaits the girl who crosses the threshold of marriage? Does the marriage ceremony work such wonders that the couple that enters its portals magically merge into one being? Or, is this figurative transformation of 'two into one' a gradual process involving much adjustment? As yet (note in 1964!) no new bride in our country openly voices her difficulties pertaining to her married life. But is that an indication of the absence of it?

Objective

The present study was undertaken with the specific purpose of understanding the various areas in which women in India have to make adjustments in the early years of marriage.

Method

Sample

The sample consisted of 50 women married for a period of not more than five years. The subjects came from different religious, educational, and socio-economic backgrounds, as well as from nuclear and joint families, and rural and urban settings. The age of the subjects ranged from 12 years to 32 years at the time of marriage.

Tool

The interview schedule used for data collection covered the following areas, namely, background factors, sex relationship, motherhood, in-law relationship, family finance, friends and recreation, and religion.

Procedure

The investigator felt that one of the drawbacks of the interview method was the difficulty in concealing the identity of the subjects and this could be minimised by making the contact as impersonal as possible. For this, it was decided to conduct the study through a Government run Family Welfare Centre. The 'patients' who came to the centre could be divided into three groups, one group which came to get help for family planning, the second group sought medical aid, and aid for sterility problems, and the third group came to seek assistance for their families' welfare. It was felt that since the 'patients' voluntarily came to the centre, they would be prepared to share information on personal relationships in their families. The purpose of the interview was made clear to the subjects who were interviewed individually. Each interview lasted approximately for one hour.

Results

1. No definite relationship between background factors like age at marriage, education, and economic status of the subject to marital adjustment could be traced.

2. At the time of marriage, 78% of the subjects had varying amounts of information about the biological aspect of husband-wife relationship. When the subjects were asked to relate the fears or anxieties of the early years of marriage, 34% said that their greatest fear was of intercourse. Fifty six per cent of the subjects said that they considered intercourse to be a normal or desirable part of married life and none of them associated guilt with the same. Thus, though Indian girls receive little or no sex information prior to marriage, they are not negatively oriented towards sex.

3. Only 60% subjects had intercourse on the night of the marriage and the remaining 40% had it after a few days due to various reasons. From amongst the 40%, about 60% delayed it as a customary practice. The customary practice of consumating marriages a few days after marriage seemed to prepare the girl better for sex and enable her to establish easier sexual adjustment.

4. Regarding the subject's present attitude to sex, the reports of 76% of the sample indicated that they were well adjusted to sex in marriage. A majority of those who still had a negative attitude towards sex were the ones whose first sex experience was of a negative type.

5. Pre-marriage acquaintance or courtship with the spouse appeared to be conducive to earlier sex adjustment. Nearly 93% of those who had courted were able to establish a positive attitude toward sex very soon after marriage. Further, the time taken for sex adjustment by them was less than those who married with no courtship.

6. Motherhood apparently is held in great esteem both by the younger as well as the older generation in our country. In the sample, 66.7% mothers had their first child within the first year of marriage, 22.2% had it within the second year, and 11.1% in the third year.

7. Orientation in a joint family did not seem to exert any appreciable influence in the establishment of an affectionate relationship with the mother-in-law. Only 25% subjects from joint family shared an affectionate relationship with the mother-in-law. However, living with the mother-in-law did help to establish an affectionate relationship with her.

8. Only 20% subjects had conflicts regarding money matters and this seemed to depend on the expectations each spouse had from the other.

9. Friends did not seem to play any significant role in the marital adjustment of the couples.

Arora, G. Opinions of Youth on factors affecting Marital Happiness. 1976.

Objectives

1. To find out the general trends in opinions of youth regarding the following factors affecting marital happiness : (a) health ; (b) age difference; (c) difference in level of education; (d) psychological maturity; (e) similarity of interests ; (f) similarity of habits ; (g) difference in socio economic background ; (h) working wives ; (i) sharing household duties and responsibility ; (j) decision making; (k) caste; (l) similarity of religious beliefs and practices ; (m) in-laws ; (n) children ; (o) jealousy ; (p) aggression ; (q) sex ; (r) conflict ; (s) divorce.
2. To find out sex differences in the above mentioned factors as related to marital happiness.
3. To make suggestions to modify the course on Marriage and Family Relations offered in the Faculty of Home Science, M. S. University of Baroda.

Method

The study was an exploratory survey to find out the opinions of youth regarding various factors affecting marital happiness.

Sample

The sample consisted of 60 boys and 60 girls, 15 boys and 15 girls from each age group of 18, 19, 20, and 21 years. The sample was selected from various Faculties of the M. S. University, Baroda. Only unmarried students who had not attended any course on 'Marriage' offered in the Faculty of Home Science were included as subjects in the study.

Tool

A structured questionnaire was constructed with help of literature available on adjustments in marriage, and experts from related fields were asked to give their suggestions in terms of statements' construction, their relevance, and rating scale used. Based on the suggestions from experts an open ended questionnaire was prepared and used The questionnaire consisted of 24 questions. Respondents were free to answer in either English or Hindi.

Procedure

The questionnaire was administered to students in groups of 10 to 15 and respondents were asked to answer independently without discussing among themselves.

Results

Necessity for making adjustment : (1) All the respondents, irrespective of sex expressed that adjustment was necessary in marriage. The reason given was 'for achieving personal happiness'. (2) Marriage partner and family members of the male partner were considered the most important individuals with whom adjustments had to be made in marriage.

Health : Health of partner was considered to be an important factor for marital happiness by a large majority of the respondents.

Age difference : Majority of respondents thought that the husband should be older than the wife. More girls indicated this, whereas more boys preferred equality in age of husband and wife.

Difference in level of education : Majority of respondents thought that the husband and wife should be equally educated and equally intelligent. But more boys indicated this, whereas more girls sought for superiority of the husband in terms of both education and intelligence.

Socio-economic background : About 50 per cent oft he respondents stressed that husband and wife should be from similar socio-economic background. A slightly lesser number mentioned that socio-economic background is not important.

Interests : While most of the respondents did not consider similarity of interests as an important factor in marital happiness, some did opine so.

Working wives : A majority of respondents, more girls than boys, favoured women working after marriage. The main reason given was, 'to supplement the family income'. Those who did not favour wives working felt that a career came in the way of performing household duties and responsibilities.

Household duties and responsibilities : Most of the respondents asserted that a couple should perform the household duties and responsibilities according to their convenience.

Decision making : Fifty per cent of the respondents expressed that all the decisions should be made together. More girle than boys considered that decisions should be made according to the respective roles.

Caste : Three fourths of the respondents expressed that caste was unimportant and it was not necessary for both husband and wife to be of same caste to achieve marital happiness.

In-laws : Family members of the spouses were mainly viewed as negatively affecting marital happinees. About 76% of respondents expressed that they may affect by ' interferring in personal and social affairs of the couple '.

Jealousy and aggression : Jealousy and aggression were considered to be adversely affecting marital happiness. This was opined by a large majority of respondents.

Children : Most of the respondents felt that children were necessary for marital happiness. More boys than girls stated this.

Sex : The factors considered important for better sexual relationship by the respondents were, ' mutual love and understanding '. Lack of it was considered a factor hindering good sex adjustments and causing conflicts in marriage.

Conflict : A majority of the respondents considered co-operation and compromise important for resolving conflicts in marriage.

Divorce : Divorce was favoured by 84% of respondents in case of inability to adjust in marriage. More girls than boys cited this.

Conclusion

1. Greater importance is being attached to necessity of making adjustments in marriage for ' mutual happiness of the couple ', than for fulfilling the demands of the society.

2. Though the trend from male superiority in age, education, and intelligence is changing to equality of the two partners in marriage, more girls prefer superiority in the husband regarding these factors. Boys seem to prefer equality between the partners.

3. More boys than girls express conservative opinion towards inter caste marriages, women working outside the home after marriage, sharing of household duties and responsibilities, children, and divorce.

Jain, S. A Comparative Study of Conjugal Relationship in Young, Middle Aged, and Old Couples. 1978

"They married and lived happily ever after", may be a fine ending for a movie or a popular novel. Happiness in marriage will not just happen, it must be worked for unceasingly. It means developing mutual relationship where both the partners work to bring harmony in marriage and family life. This ever changing relationships gets affected by different factors such as physical, social, emotional, and economic conditions. No single factor can be held to be exclusively responsible for good or poor adjustment in marriage. The present study, deals with the social, emotional, and sexual aspects of conjugal relationship in young, middle aged, and old couples.

Objectives

1. To gather information regarding social responsibilities and participation, emotional relationship, aad sexual relationship in young, middle aged, and old couples.
2. To find out age and sex differences in responses, in the above mentioned aspects of conjugal relationship.

Method

Sample

The criteria for sample selection were age, marriage span, and type of family. The total number of subjects were 60 couples selected from Baroda city, twenty couples from each of the age groups young, middle aged, and old couples, 26 to 35 years, 41 to 51 years, and 56 to 60 years, respectively.

Only those couples who were from three generation families were included. None of the wives were working or childless.

Tool

A structured questionnaire was used. Most of the items were taken from tool prepared by Kapoor (1970) for her study on marriage and the working women in India. A few items were modified to suit the present purpose and a few questions were added by the investigator.

The final questionnaire consisted of two parts. Part I consisted of background information and personal characteristics of the subjects. Part II consisted of questions regarding the factors affecting conjugal relationship. Structured as well as open-ended questions were included in the second part of the questionnaire.

Procedure

Couples were contacted personally, appointments taken, and both the partners were asked to fill in the questionnaire simultaneously while the investigator was present. Complete confidentiality was assured.

Results

Social Responsibility and Participation

1. *Sex differences*: Comparatively more wives than husbands expressed that they had few friends in common.

2. *Age differences*: (a) More old couples than the young and the middle aged checked that they rarely decided to visit friends and relatives. (b) Fewer old couples (5%) than the young (17.5%), and middle aged couples (27.5%) responded that budget making was rarely a co-operative venture in their life.

Emotional Relationship

1. *Sex differences*: (a) More husbands than wives responded that (i) they occasionally did the things that their partners disliked, (ii) they wanted co-partnership in their relationship with other partner. (b) More wives than husbands responded that (i) they rarely did the things that their partners disliked, (ii) they wanted to have superiority in the other partner.

2. *Age differences*: (a) Fewer old couples in comparison to the young and the middle aged couples responded that (i) only few of their expectations were satisfied by the overall environment in which they had to live after marriage, (ii) both of them made equal efforts to bring about harmoney in their married and family life. (b) More old couples as compared to young couples responded that quite a few of their desires that they expected their partners to satisfy were being satisfied by them.

Sexual Adjustment

1. *Sex differences*: (a) More wives than husbands responded with reasons as, (i) ' He/she is particular that in sex act with him/her you must also be satisfied ', (ii) he/she is considerate and never insists on having sexual union ' when you are tired or otherwise not keen for it '.

2. *Age differences*: No age differences were found for the couples from the total sample.

Conclusion

Though sex and age differences can be seen from itemwise analysis of data, the total picture does not reveal any major age or sex differences.

Maragatham, M. David, D. A Study of Family Relationships of six families in a Jat Village near Delhi. 1963.

Objectives

1. To gather data on family life in a village, including inter-personal relationships, parent-child relationships, and sibling relationships.

2. To gather information about child rearing practices in a rural setting.
3. To determine whether there are observable differences in family behaviour patterns between those whose men (head of family) are employed in the city or in village itself.

Method

Sample

Six families of Rajpur village were included in the study. In three families, the head of the family worked as a Government or semi-Government employee in the city of Delhi. In other three the men worked in the village as farmers or some other occupation (weaver). Families which had both sons and daughters were selected for the study Other selection criteria included : at least one child in school, husband-wife be of middle age, families be available and co-operative.

Tool

An interview schedule was used for the study. The first part of the interview included items related to attitude toward pregnancy and birth, child rearing practices related to feeding, weaning, toilet training, bathing, clothing, and sleeping.

The second part of the interview dealt with family relationships including, parent-child, sibling, and husband-wife relationships.

Procedure

Both the interview and observation methods were utilised to collect data. The children were observed at home for child rearing practices and six case studies of the families were carried out. Interviews were conducted in short informal sessions, and responses were noted after the interview, as note-taking during the interview came in way of subjects' free response. Ten to twelve interview sessions were necessary for each subject.

Results

1. *Pregnancy* : No cermonies were conducted to acknowledge pregnancy. From the seventh month of pregnancy mothers took better food than they did otherwise. There was no pre-natal care.

2. *Birth* : The babies were of normal birth and women worked till the time of delivery. All deliveries in the urban employed (UE) families were done by local midwife, but in case of rural employed (RE) only the first and second delivery was done by mid wife and the rest were conducted by an elderly lady of the house. Birth of girl was just recorded at Pradhan's house whereas birth of boy was celebrated with lot of pomp and gaiety. Mother's parents had to provide clothes for both mother and infant.

3. *Feeding schedule* : In all the families the new born baby was given sugar water for three days and breast fed only after the fourth day. The child was fed whenever he demanded. A special paste from a particular tree was given for stomach trouble.

4. *Crying* : The child was fed when he cried. In UE families, if the child cried the father or older sibling would attend to the baby. Whereas in RE families the father never attended the child due to lack of leisure time and mother's due to over work often tended to hit the child when he cried.

5. *Clothing* : No new frock was stitched for the new born till the sixth day, then on the sixth day the child was dressed in a green frock stitched by the mother-in-law or sister-in-law of the mother.

6. *Toilet training* : Toilet training was not regular. The baby was placed sometimes between the mother's ankles for defecation. As the child grew, he was beaten if he soiled his clothes or the house.

7. *Parent-child relationship* : Children were taught to obey and respect their parents and punished if they failed to do so. However, no child was observed to be hostile toward the parent or vice versa. Boys received more affection than did girls.

8. *Sibling relationship* : The elder girls took it for granted that it was their responsibility to look after the baby. The girls were told to give whatever the brothers wanted. They fought a little at home but were very quiet outside.

9. *Husband-wife relationship* : For UE families the husband helped the wife in her household task to a certain extent, but the RE husband did not even find time to talk to the wife during day time. The UE husbands slept in the same room or room next to the wife's, but the RE husband slept in the court-yard or fields. Both had sexual relationships after the other members slept or when wife brought food to the field in case of RE families. The UE couples felt bad when they quarreled in front of the children whereas the RE couples had never thought about it. The UE couples handled money matters jointly whereas in RE families the husband was the only one to handle money matters.

Chawla, H. A Study of Family Relationships of 29 Baria Families of Rajpur Village in Gujarat with Special Reference to Husband-Wife and Parent Child Relationship. 1967.

Objectives

1. To prepare case studies on family relations which provide an insight into the process of family dynamics.
2. To study the husband-wife and parent-child relationships in 29 Baria families of Rajpur village in Gujarat.

3. To explore the pattern of relationships of integrated families and non integrated families and the factors contributing to the same

Method

Sample

The 29 families comprising the sample of the study included Rajputs, Chavda, Chauhan, and Solanki castes. About 59% of the families were nuclear and 41% joint families. Majority of the families (58.6%) had two earning members. While 62% of husbands had at least primary education, only 24% of the wives had similar educational qualifications. Most of the families had 3 to 5 children.

Tool

Most of the data utilized in this study had been collected as part of an earlier departmental research project. Additional information was collected only where necessary. Data included background information on the subjects; aspects of husband-wife relations such as, dominance of spouse, division of labour between husband-wife, disciplining children, differences of opinion between husband-wife, and decision making; aspects of parent child relationships such as parental interest in children; time spent with children, use of praise or punishment in disciplining children. education of children, and demonstration of love by parents.

Plan of analysis

On the basis of the relationships (husband-wife and parent-child) the families were categorised with the help of a rating scale prepared by Thomas Poffenberger.

According to the rating scale, (a) an integrated family varied from somewhat positive to very positive relations, (b) middle family was neutral in between negative and positive (constructive and destructive elements were balanced), (c) conflicting families were families where the relations varied from very negative to somewhat negative (usually disruptive).

The investigator selected 8 experts to whom she gave all the 29 cases along with the rating scale. This was done to make the categorization valid and reliable.

Results

The families could be categorized as integrated (62%) and non-integrated (38%). The findings are presented in four sections.

Family background factors

These were studied in relation to the type of family, age, occupation, and education of parents, number of children, and number of other adults in the family.

1. There were more nuclear families than joint families in integrated category, and more joint families in non-integrated category.

2. The types of occupation and number of earning members in the family were not related to integration and non-integration of the family. However, a surprisingly large number of educated males and females belonged to the non-integrated families.

Husband-wife relations

These were studied in relation to spouse domination in the family, consultation of wives by husbands, husband's co-operation in household activities, type of help given by husbands, and division of labour.

1. Very few of the integrated families had either spouse dominating. Majority of them gave more value to mutual love and understanding. They expected that both husband and wife should be equally responsible for family matters. In some families where the couple was young with one or two children, the in-laws dominated. In non-integrated families there was no case of complete domination by the wife. It was either the husband or in-laws or husband and wife both equally dominating. Some of the wives expressed their views against domination of their husbands and demanded equal rights.

2. Majority of wives were consulted in integrated families and reverse was the case in non-integrated families. In many of the non-integrated families, wives realised that the cause of conflict in their families was because the husband never consulted the wife in any matter.

3. In the integrated families 50% of the husbands never helped their wives. In only one third of all families studied the husbands partially helped their wives. Only one out of eleven non-integrated families showed that husband gave full help to his wife whenever required.

4. Majority of the husbands helped their wives in cases of sickness, especially in the absence of a female member in the home. Very few of them extended help during delivery and menstruation. The number of husbands who gave help was less in non-integrated families. Husbands generally helped the wives in looking after the child, bathing, feeding, and discipling. Few helped in other house work.

5. In the present sample there was no strict division of labour in the integrated families whereas in non-integrated, there was clear division of work between the husband and wife.

Parent-child relationship

1. A common feature in majority of the families was that parents were concerned about children's health, education, and diet. In most of the integrated families the parents were against punitive disciplining, and they believed

that reward and praise were better methods of disciplining. In these families fathers also spent a lot of time with the children and the children were not afraid of their fathers. The reverse was true of non-integrated families. In both types of familes the parents gave certain duties to their children to make them feel responsible about some of the household chores.

Concluding comments

In sum, the reasons for harmony in integrated families included co-operation and understanding between husband and wife, affection for children, mutual appreciation, and consensus on child rearing practices. The reasons for friction in non-integrated families included, lack of co-operation between husband and wife, differences in opinion regarding discipline, gambling, drinking, and absence of interest in children in fathers. Reasons such as extra-marital relationships, low income, domination by either spouse or the wives superiority over husband were also additional contributing factors.

Khosla, E. Resource Materials for the Course on Marriage. 1979.

The institution of marriage has undergone many changes in recent times and is becoming more and more complex. The expectations, beliefs, customs, norms, and ideas related to marriage are influenced by the changes. As a result of this, parents can neither be appropriate models for marital role performance nor feel competent enough to guide the children on the same. In response to the changing social situation, educational institutions have undertaken the responsibility of exposing youth to varied alternatives and ideas related to marriage as an institution.

The use of various audio-visual aids and different techniques can make a course like marriage both interesting and meaningful. The teacher can use newspapers, magazine articles, films, T.V. programs, etc., and relate the teaching to practical experiences relevant to the students in their daily life.

Objective

The objective of the present study was to develop resource materials and teaching aids for the course on Marriage.

Broadly, the course covers areas such as preparation for marriage, adjustment and crises in marriage, marriage counselling, legislation and the future of marriage, and family in India.

For the present study the resource materials were classified into the following three broad categories : Audio aids-which are instructional devices that can be heard but not seen i.e. such as radio, cassette, etc., Visual aids which can be seen but not heard such as slides, cartoons, charts, etc., and Audio-visual aids-which can be heard and seen simultaneously such as films, cassette-slide show etc.

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For each unit of the course on marriage the following materials have been compiled/collected/prepared and presented.

Components of the kit

Bibliography : Books with relevant chapters, along with their titles and page numbers have been listed to facilitate prior reading among the teachers and students.

Highlights of researches conducted in Child Development Department Baroda : Highlights of the results of various researches have been presented according to their relevance to a particular unit.

Research articles : Abstracts of two researches per unit along with brief description of the purpose, method, and findings of the researches have been given. An attempt was made to focus particularly on Indian researches.

Abstracts of magazine articles : Abstracts of some of the appropriate articles from popular magazines, namely, Femina, Eve's Weekly, and Reader's Digest have been presented because these magazines are widely read and they also publish articles which are relevant for the present purpose.

Situations : Incidents that happen in day to day life of married couples have been presented along with questions so that teachers can use these situations and questions to encourage discussion in the class.

Films: Summaries of various commercial and educational films have been given in various units and along with them questions or points for discussion are formulated. The addresses from where the educational films can be obtained have also been mentioned.

Aids : Various types of audio-visual aids which can be used have been prepared. This is to facilitate the teacher-students interaction in planning and preparing together so that they are more involved in the course.

Question-Bank: For each unit test items have been formulated and relevant assignments for each unit have also been suggested.

Verma, A. & Poffenberger, T. Social Change and Perception of Change in Child Rearing Practices in a Suburban Indian Village. 1970.

The Goverment of India has set as a major objective, an increase in the standard of living for all its people. Since the country is still largely rural, a central focus must be on the villages of the country. This progress can take place only through increasing diffusion of elements of modern science and technology. While this process will bring material benefits, it will also bring about conflict with traditional values as fundamental modifications in social and behavioral patterns take place. It is the mores and folkways of the traditional society that maintain social control but which in doing so tend to inhibit the development of individualism that results in the kinds of initiative, independence, and creativity that are needed for the change to modernity.

However, the increase in individualism and reduced effectiveness of traditional controls may result in what has been called " indiscipline ". It is important for planners of change to have indicators of the kind of social and behavioral changes that are taking place as a result of the process of modernization and urbanization. Since changes in child rearing practices indicate determinants of adult values, beliefs and behavior, a study of these may provide one of the keys to understanding the dynamics of change.

Objectives

1. To determine how a sample of village parents perceived changes in aspects of child-rearing practices.
2. To determine their reactions to these perceived changes.
3. To determine perceived reasons for change.
4. To determine the direction that changes in child-rearing may be taking.

Assumptions

1. Child-rearing practices tend to change as a result of sociological and technological change.
2. Changes in child-rearing practices results in changes in children, who, when they become adults, believe and behave differently than those in the previous generation.
3. The new generation of adults, affect, in turn, the process of social and technological change.
4. Expressed opinions of villagers regarding changes in childrearing are regarded as the way they perceive change and one indication of the direction of change.

Method

Sample

Sixty-seven families had been studied intensively for two years prior to the collection of data on change. For the purpose of the present study, 24 families were selected from these sixty-seven families for the study of parents' perception of changes in child rearing practices. The 24 families were selected because both the husband and wife had previously been co-operative in working with the staff and it was believed they would respond to such questions.

Variables

The independent variables were caste and sex.

The dependent variables were opinions regarding change in child-rearing attitudes, regarding the change and expressed reasons for the change, in the following behavioral systems : oral, anal, sex, dependency, achievement, autonomy, obedience, sociability, dominance and aggression.

Instrument

The statistical data relative to each behavioral system are based upon three questions asked.

1. Is there any difference between present child-rearing practices and those of the past ?
2. What do you think about the change ?
3. What do you think are the reasons for the change ?

The respondent was asked to consider the questions within the time framework of changes that had taken place in child rearing practices from their parent's or grandparent's time to the present. Because some of the mothers and fathers were considerably younger than others, it was found to be more effective to give them a choice of generations.

Interview Procedure

The procedure followed in each aspect of the study was to have the interviewer memorize the schedule of questions to be asked. After each interview, the answers were recorded by the interviewer in a private room in the village provided for this purpose. All responses and observations were recorded in English and typed. Each interview and observation report was read and reviewed with the field staff member who collected the data to assure clear meaning to responses and validity of content. The advantage of a large (6) staff, their intimate knowledge of the village and village families, and several years of continuous village work offered an unusual opportunity to cross check basic data.

The data reported in Part II (of the published book) Historical Development, and Part III, The Cultural Context, were the result of the synthesis of three years of interviewing and observation of all aspects of village life, including case history studies of 68 families from which the 24 were selected for specific interviewing regarding changes in child rearing practices.

Results

Perception of change and reaction of parents

Feeding

There was general agreement on the part of the sample that children were breastfed a shorter period of time today than in the past. From the standpoint of developing independence this may be a relevant factor. Along with earlier weaning is an earlier introduction of supplementary food. Since supplementary food involves self-feeding it might be assumed that this will encourage earlier tendencies toward independent behavior.

There is an increasing tendency for children to drink tea. Some mothers say that even babies of nine months are given tea. The possible significance of this lies in its social aspect. When family members have tea or it is served to guests, the children are usually included in this socialising event. In the past, village mothers believed that it was not good to give solid food to a child who was not yet walking. There is now some tendency toward a change in this belief as a few mothers express the attitude that giving solid food earlier actually improves the child's health.

The majority of mothers indicated that there is more permissiveness today toward taking food and water from other castes. This is another factor in the growing tendency toward greater freedom in terms of many aspects of the child's life. The gradual removal of rigid caste restrictions in regard to food may have a significant effect on the perceptions of the child in terms of his freedom in dealing with the environment.

Elimination and cleanliness

There was a general belief expressed by the parents that villagers had become more strict with children regarding their elimination habits. Members of all castes said that feces is associated with disease, and therefore it is important that children be taught a proper place to defecate. They said that in the past young children would defecate and urinate in the house or just outside the house but that now parents insist that they go some distance from the house for both urination and defecation.

The parents believed that there have also been changes in other aspects of cleanliness. They reported that children are no longer allowed to play in the dirt and that their clothing is kept cleaner than it was in the past. A Baria father said that a mother will now look after a child's nasal discharge or clean a child who has wet his clothing whereas in the past she would have ignored it.

Children were also said to be bathed more frequently. There was reported to be an increasing use of soap when it can be afforded and some parents said that they now use talcum powder on infants.

Modesty training and knowledge regarding sex

Along with perceived change in regard to the value of cleanliness, villagers indicated some change regarding the age at which children first begin to wear clothes. They said that in the past children would go naked until the age of ten or twelve but that today children are dressed from infancy. The reasons given were similar to those relative to other values ; that family prestige would be lowered if children went without clothes and that new concepts regarding clothing have come from greater education and from outside influences.

There was almost unanimous agreement among the parents that children today have more knowledge of sex than they did in the past and there was total parental disapproval of the change.

Dependency, aggression and achievement

Somewhat over half of the sample said that they believed that children were less dependent today than in the past. However, there were significant sex differences in response to this question. Fathers more than mothers were inclined to believe that children were less dependent now than in the past. The probable explanation for this is that the fathers were thinking in terms of older children while the mothers were thinking in terms of younger ones. Even so, a number of mothers (over 40 percent) did express the feeling that children were less dependent today than they had been previously.

The majority of the parents agreed that children today are more aggressive toward parents and toward other children than in the past. The major response was that parents' leniency had produced aggression but women, especially, were likely to blame the behavior on Kaliyug.

When the villagers speak of achievement, almost all think in terms of education and the kinds of occupations that can be obtained through education. There is a recognition that traditional occupations are no longer as profitable as newer jobs that are offered in the world outside the village. Villagers are also aware that for their sons to meet job requirements they need more education than they themselves had.

Respect for elders and obedience

Essentially, the elder parents voiced concern that the power hierarchy of the joint family and respect of elders had been rejected by youth. Whereas " disgust " and " contempt " of parents might not actually be present in a son's relationship to his parents, it was evident that elders interpreted the modern behaviour of youth in this way.

In spite of the current distress of parents regarding a breakdown in respect and deference to elders, the trend for youth to make decisions on their own, to be more self-confident and self-reliant in personal and vocational situations may become a constructive influence in decisions affecting general family welfare.

In summary, it would seem that obedience was perceived by parents as both a simple, expected response which children should comply with in everyday situations and as a pattern of general loyalty and response to one's parents. The majority of the respondents believed that there is a present lack of obedience related to lack of parental strictness. The breakdown in strictness was said by some parents to be related to encouragement of children's rudeness.

Physical punishment was said to have been severe in the past but not now. Some parents indicated that it had been discontinued because of the fear that children would be seriously hurt and then the parent's source of security would be gone. A wide variety of reasons and rationalizations were offered for the stated decrease in punishment of children.

Arondekar, S. Case Study of Child Rearing Practices of ten Families from High and Low Socio-Economic Groups. 1965.

Desai, M. A Study of Child Rearing Practices with References to Feeding and Toilet Training in High and Low Socio-Economic Groups. 1965.

Singh, A. A Study of Child Rearing Practices with References to Feeding and Toilet Training in Higher Middle, Lower Middle, and Lower Socio-Economic Groups. 1966.

The child's first process of socialization begins within the family. It is through this process of socialization that the biological individual becomes a social human being. The mother is the focal point in the family, who through her various child rearing practices, trains the child in developing self control and accepting socially desirable modes of behaviour. In the context of personality development of the individual, it is viewed that, by virtue of being a member of a particular class, the mother's handling and training the child will be conditioned by the social class to which she belongs. The studies reported here were conducted to understand the child rearing practices of the different socio-economic groups.

Objectives

1. To study the child rearing practices in the higher, middle, and lower-socio-economic groups.
2. To study the differences in child rearing practices among these groups.

Method

Sample

The sample of all three studies was drawn from the infant testing project of the department designed to study the motor and mental development of children. The education of the parents and income of the family was taken into consideration to determine the socio-economic status of the families.

The sample for study 1 (Arondekar, 1965) consisted of 10 families belonging to higher socio-economic group and lower socio-economic group. The sample for study 2 (Desai, 1965) consisted of fifty mothers of children between 1½ years to 2½ years of age, 25 mothers belonged to higher socio-economic group and 25 mothers belonged to the lower socio-economic group.

The sample for study 3 (Singh, 1966) consisted of fifty five families belonging to the higher middle, lower-middle, and lower socio-economic groups.

Tools

Mother's interview schedule was used for collecting data for all the three studies. Study 1 (Arondekar, 1965) used the schedule adapted from Poffenberger's project on child rearing practices. This schedule included questions on child rearing practices in infancy and early childhood, and on family relationships to get knowledge of the family interaction. Studies 2 and 3 (Desai, 1965; Singh, 1966) used the schedule adapted from Sears MacCoby and Lewin (1957) and Poffenberger's project on child rearing practices in the department. The schedule consisted of a series of open-ended questions in two areas, feeding and toilet training. Feeding included all activities of sucking, drinking, eating behaviours, regulation and control of eating behaviours, techniques used to change the behaviour, and type of food taken. Toilet training included bladder training, bowel training, and modesty training.

Procedure

Mothers were interviewed at their homes by the investigator. Interviews took place either in Hindi or Gujarati or English depending upon the language known to the mothers and were rated on the rating scale prepared by the investigator. The median age of children in months and percentages of frequency of occurrence were computed to show differences between the different socio-economic groups.

Results

Results show definite similarities and differences between the various socio-economic groups in their child rearing practices.

1. *Feeding* : The mothers in the higher socio-economic groups weaned their children earlier than those in the lower-socio-economic groups. Duration of bottle feeding was more in the lower socio-economic groups. The higher socio-economic group mothers followed a more strict feeding schedule, while the lower socio-economic group mothers were more relaxed. In disciplining the children while eating, the higher socio-economic group mothers enforced more disciplinary measures than the lower socio-economic group mothers.

2. *Toilet Training* : The median age of beginning and completion of bowel training did not differ between the two groups in Desai's (1965) study. However, in the other two studies (Singh, 1966 ; Arondekar, 1965) the toilet training began earlier in the higher socio-economic group than in the lower socio-economic group.

Personal hygiene and cleanliness were emphasized in the higher socio-economic group more than in the lower socio-economic group. The location permitted for defecation in the higher socio-economic group was the lavatory whereas the lower socio-economic group permitted it outside or in front of the house. This difference was due to differences in living conditions. The higher socio-economic group mothers started bladder training at a much earlier age than the lower socio-economic group mothers. Verbal punishments were mostly used as disciplinary measures by all the socio-economic groups. However, in Desai's study the lower socio-economic group mothers have reported the use of physical punishment,

3. *Modesty Training*: In Arondekar's (1965) study, the higher socio-economic group mothers emphasized modesty training, and modesty in girls was more emphasized than in boys in both the groups. However, in the other two studies (Singh, 1966; Desai, 1965) the lower socio-economic group mothers were more concerned about modesty training.

Other findings in Arondekar's (1965) study included:

1 The mothers from the higher socio-economic group spared time to play with the child or go for a walk. The mothers from the lower socio-economic group did give time required to take care of the child in feeding, bath, and toilet.

2. Male babies were welcomed more than female babies in both groups.

3. Mothers from the higher socio-economic group seemed to hold a more permissive attitude towards masturbation if occasionally found, than the mothers from the lower socio-economic group.

4. The higher socio-economic group mothers were less permissive for dependency than the lower socio-economic group mothers.

5. The higher socio-economic group mothers reported occasional temper-tantrums in children while the lower socio-economic group mothers reported frequent temper-tantrums in their children.

6. The higher socio-economic group mothers were more demonstrative towards their children.

7. In both groups the older siblings were encouraged to look after the younger siblings. In the lower socio-economic group, in case of sibling rivalry, parents seemed to support the younger child.

Sethi, S. A Study of Child Rearing Practices with Reference to Feeding and Toilet Training in Two Villages (one in Gujarat and one in Punjab). 1967.

Each society has its own cultural milieu. Informally or formally, each society teaches certain accepted ways of thinking, feeling, and behaving characteristic of its culture. Feeding and toilet training are some of the practices which need enculturation, and may vary between and within cultures.

Objectives

1. To collect information from the mothers, residents of two villages in Gujarat and Punjab, on child rearing practices in the two areas of feeding and toilet training.

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2. To compare feeding and toilet training practices in a Gujarat village with that of a village in Punjab.
3. To make comparisons of the above mentioned practices between comparable castes in the two villages, i.e. (a) the dominating agricultural castes (Patidars in Gujarat and Jat Sikh in Punjab) ; (b) Harijan castes (Vankar in Gujarat and Chamar in Punjab).

Method

Sample

Fifty six mothers from Rajpur and 60 mothers from Sanghra who had children between 4½ and 6½ years were selected as subjects for the study. They represented the four castes in the villages. Patidar, Baria, Bhil, and Vankar of Gujarat and Jatsikh, Brahmin, Artisan, and Chamar of Punjab.

Tool

The study of child rearing practices of the two villages was related to the five behavioural systems namely feeding, toilet training, sex, dependency, and aggression. Interview technique, and participant and non-participant observation methods were used for the purpose of data collection. The interview schedule adopted from Sears (1957) interview schedule by Poffenberger and modified according to the Indian conditions, was used for the present study. It consisted of a series of open-ended questions followed by suggested probes which the investigator was free to use or omit depending upon the answers to the original questions. As the present study was limited to feeding and toilet training, only items on these were included in the interview schedule. The following were the sub-categories in the major areas of feeding and toilet-training. Feeding : breast feeding, self-demand/schedule feeding, weaning, and eating habits. Toilet-training : bowel training, bladder training, and modesty training.

Procedure

The interview, with prior appointment, was conducted at the mother's residence and the mothers were informed about the objectives of the study and the nature of the interview through informal conversation earlier. The investigator recorded the interviews which lasted about an hour, immediately after the termination of each meeting. Observation of the incidental behaviour involving mother child interaction during the interview were also recorded though the main focus was on the interview only.

Results

1. Almost all the mothers in both the villages breastfed their children on self demand basis in the initial stages. In the total sample, only 3.3% mothers from the Sanghra village did not breast feed their children.

2. Mothers of the two villages differed in the age at which they first introduced the supplementary liquids to the child. Mothers in Sanghra started giving supplementary liquid earlier (as early as one month) than mothers in Rajpur. No mother from Rajpur started the liquids in the first month of the child's life. The median age for introduction of supplementary liquids differed by 7.2 months.

3. Mothers of Rajpur introduced solids at 11 to 12 months of the child's life i.e. 2 months earlier than mothers of Sanghra.

4. Most of the mothers gave reasons for weaning the child as ' pregnancy of mother ', ' age of the child ', and ' inability to breastfeed the child '.

5. In both the villages, the most common method used in weaning were ' applying bitter substance on the breast ', ' commenting ', and ' mothers withdrawal from the situation '.

6. Mothers faced various degrees of emotional upsets in their children when weaning. No mother in Rajpur reported about strong and very strong emotional upset but about 11.7% mothers from Sanghra reported strong and very strong reactions.

7. The difference in the median ages at which mothers gave adult diet to the children in the two villages was 6.4 months. Mothers of Rajpur, started giving adult diet at an earlier age i.e. 17 months.

8. Mothers in Sanghra reported that their children completed bowel training before 34 months. On the other hand in Rajpur, most of the mothers reported that children finished bowel training after 34 months. A difference of 10.3 months in the median age of completion of bowel training was observed.

9. Fifty per cent of the mothers in Rajpur never punished the child. Eighty per cent of the mothers of Sanghra village punished the child either occasionally or rarely. Only 20 per cent never punished the child. Mothers of Rajpur used physical punishment more whereas mothers of Sanghra used other types of punishment such as ' deprivation of privileges ', ' withdrawal of love ', ' fright of supernatural forces ' etc.

10. Mothers of Sanghra were more concerned about modesty training from early age (31 to 36 months) than mothers of Rajpur.

Jawa, V. A Study of the Shifts in the Mother's Handling as the Child Grows From Birth to Five Years. 1972.

Paliwal, N. The Child's Life at Home From Five to Twenty Five Months (Longitudinal Approach). 1971.

It is a universally accepted phenomenon that the mother assumes the major responsibility for the care and training of the child during his infancy and early childhood. Apart from caring for his physiological needs, the mother's task is further extended to that of training the child to move towards more mature behaviour, as eventually the child must assume the role of an adult as defined by that particular society of which he is a member.

The mother acts as a prime mediator between the child and society. A mother's handling behaviour is dependent on both the child's characteristics and the society's expectations from him. This study is based on the longitudinal data collected by the department under the infant testing project (1962 to 1970) to study the growth and development of Indian babies. An attempt has been made to take a comprehensive view of the shifts in mothers' handling behaviour in different aspects namely feeding, toilet training, sleeping, bathing, washing, and dressing as the child grows from birth to five years.

Objectives

1. To analyze the handling behaviour of mothers as manifested in the various aspects of the child's life at home.
2. To analyze the shifts in mothers' handling of their children from birth to five years.
3. To analyze individual differences in the mothers' handling behaviour.

Method

Sample

The main sample consisted of 85 mothers whose infants were subjects in the Department's longitudinal study. An additional sample of 30 mothers from two nursing homes in Baroda, Lady Pillar Nursing Home and Maharani Shantadevi Nursing Home had to be chosen to obtain information on the first four months of the child's life. This information was not available from the longitudinal sample.

Tool

An interview schedule was used to collect information about the child's life at home and the mother's handling of the child. This schedule consisted of several items concerned with the areas of feeding, toilet-training, sleeping, bathing, washing, and dressing.

Procedure

The investigator interviewed the mothers in their homes within ±3 days of the child's monthly birth-date. First the mothers were acquainted with the purpose of the study and then requested to answer a few questions regarding the child's life at home and the mothers' handling of their children. Meaning of the terms in the schedule were interpreted to the mothers as and when necessary.

Results

The results deal with the following aspects of the child's life at home :

1. *Feeding* : During the first year of his life, the mother assumes the entire responsibility of feeding the child herself. By the end of the first year, the mother initiates the child to feed himself. From two and half years children feed themselves eitheir independently or with the assistance of others. During the end of the first year, children are initiated to take part in the family meals and this practice increases with increase in age. Throughout the five years most mothers follow a fixed schedule for the child's feeding time. Snacks are given both on demand and at scheduled time till his third year. Mothers communicate concern to the child for his food intake by the end of one year and they generally coax him to eat food essential for his growth.

2. *Toilet-training* : Most of the mothers toilet-trained their children during the period between 12 months to 24.5 months where they took their child to the toilet at regular intervals. At 12 months some mothers began to explain the need of control to the child. Between the period of 18 months to 30.5 months, most of the mothers manifested negative handling behaviour which however did not extend to occasional toilet accidents.

3. *Sleeping* : Majority of the mothers allowed their child to sleep with them till 2.5 years. The mothers continue to help the child go to sleep upto 3.5 years. During the first year, in case the child wakes up mothers feed the child but during the second and third year, patting, rocking, and cuddling are commonly employed techniques. Towards the end of fourth year mothers start ignoring the child if he wakes up at night.

4. *Bathing, Washing, Dressing* : By 3.5 years mothers initiate the children to bathe themselves. At 30.5 months, mothers initiated the children to wash themselves without help. At five years all the mothers reported that their child dressed independently.

Concluding Comment

It is evident from the study that the mothers change their handling behaviour as the child grows and develops. To most Indian mothers, a child is one of the many responsibilities at home and hence she finds it convenient to do most of the tasks for the child, rather than letting him do them independently which would then require more time and close supervision.

Gambir, S. The Child's Life at Home from Birth to Five Years with Special Reference to Social Interaction. 1972.

Objective

1. To study the child's life at home in the early years of life, from birth to five years with special reference to social interactions including feeding, play, communication, and expected social behaviour.

Method

Sample

Out of the 402 interviews conducted in the longitudinal growth study, 397 interviews were drawn for the present sample. These selected interviews are distributed at different ages from five months to five years. A total of 84 mothers had been interviewed longitudinally.

A total of 30 interviews were taken cross sectionally for the additional sample to fill in age gaps. Grouping of children's ages was done, a minimum of 15 in each group to get substantial knowledge and information about the child's life at home. The sample selected for the present study was from upper and middle socio-economic groups.

Tool

An interview schedule was used to collect information about the child's life at home from the mothers. The schedule included items related to feeding, toilet training, sleeping, washing, dressing, play, communication and expected social behaviour.

Procedure

Prior to data collection, the investigator was trained to build up an understanding of the interview schedule. Mothers were interviewed longitudinally after every three months till 25 months of the child's age, then at six months intervals upto the age of 5½ years. Interviews were taken either in the department itself or at the homes, depending upon the appointment made. Home-visits were made by the investigator to get a clear understanding of the child's life at home. Interviews were taken in Gujarati and responses of the mothers were recorded on a three point scale simultaneously. During the first interview background information was taken on special information sheets. Some special remarks made by the mothers were also recorded.

Plan of Analysis

Frequencies and percentages of the mothers' reporting about the child's behaviour were calculated for different age groups.

Results

1. *Feeding*. When the child is young he starts taking food by himself and with little help from others. Till 15 months he is fed alone after which he joins other children and adults in the family. By 3 years, more than 50% of children start taking their meals with other adults in the family. The child is no longer fed alone.

2. *Play*. The child's toy kit gets enriched with increasing age. He has sound producing toys at the period before 12 months and at later ages, i.e. after 2 years, he has vehicles, constructive toys, and books. At about 30 months he

starts sharing toys; and most of the children keep their toys in order at 24.5 months. Children do not have any hobby till 5 years of age after which they are encouraged to collect things. At a young age children play at home. After 12 months they start playing at different places like courtyard, playground, and street.

3. *Communication :* Children use multiple expressions to indicate needs and desires. These include flattery, request, shouting, being surly, and throwing temper tantrums. Request is used by majority of the children. Temper-tantrums start decreasing after 30.5 months. When the need for asking questions arises majority of the children approach both the parents. Physical contact is sought by almost all the children at every age. The child does not follow adults or need presence of adults after 30.5 months.

4. *Expected social behaviour :* By 5 years all the children communicate in a socially approved manner with the parents. With increase in age the child's communication improves with adults in the family and with strangers. Sometimes he does not communicate in socially approved manner with his siblings. At 3½ years 50 per cent of the children seek permission to go out, and at 4 years, the child becomes aware of the property belonging to others and asks permission to use it. Not many children interfere with adults' talk or activity. Asking questions emerges later and percentage of children who exhibit this behaviour increases with increasing age. Not many children are reported to tell lies and use foul language.

Concluding Comments :

In conclusion, as far as social interactions of the child are concerned, they are within the family circle until the age of 30.5 months. At this age not only does the child enter nursery school and his social circle is widened but even at home his social contacts increase.

With growing age the child takes up certain responsibilities and learns some special skills which help him to take initiative to interact with more people. At first his expressions of social interactions with different people are not on par with social expectations. Gradually he learns modes of expressions which are socially acceptable.

Khattar, M. Knowledge Content of Mothers (Of Under Fives) for Efficient Mothercraft with Special Reference to Physical, Motor, and Mental Development. 1974.

Pandey, M. Knowledge Content of Mothers (of Under Fives) for Efficient Mothercraft with Special Reference to Social and Emotional Development. 1974.

Bhattacharjee M. Knowledge Content of Mothers for Efficient Mothercraft (Infants and Pre-Schoolers). 1975.

Devi, N. Knowledge Content of Nepalese Mothers of Khatmandu for Efficient Mothercraft. 1976.

Mewar, J. Knowledge Content of Mothers from Baroda for Efficient Mothercraft with Reference to Children Upto Five Years. 1977

In every society, child-rearing is largely the mother's responsibility during the early of childhood. In a changing culture, a mother should be efficient enough to bring up her child in such a manner that he or she may be able to face the complexities and contradictions of the adult world.

The recent strides towards the scientific knowledge gained through the various studies done in the field of child development would leave any parent confused. Moreover, in actuality, the scientific findings in the field do not reach the mother for whom it is absolutely necessary to know.

Khattar, M. & Pandey, M. (1974).

Objective

1. To collect opinions of the various experts in the field as to what they consider to be the essential knowledge content of mothers for efficient mother-craft.

Method

Sample

The sample consisted of 42 experts from the following seven fields—child development, education, nutrition, pediatrics, psychiatry, psychology, and social work. All the experts were post-graduates with a minimum of five years experience in their respective fields.

Tool

Interview method was used for collecting information from the experts. For both the studies, a pilot study was undertaken with structured interviews based on questions related to physical, mental, motor, social, and emotional development of children. These interviews were first tested with three experts from the department itself. The experts gave a feedback that the structured schedule was of limited use in a study of this nature. Therefore, an unstructured schedule with a common introduction was finally used for the actual data collection. The interviews were tape-recorded and later transcribed.

Procedure

Data was collected by two investigators working on the same study but in different areas. Appointments with the experts were taken personally and the nature and objectives of the study as well as the interview were explaned. This also helped in building rapport between the two. A three days interval was kept between the day the appointment was taken and the day of the interview in order to give the interviewee sometime for consolidating his/her thoughts and opinions for fruitful discussion. All interviews were tape-recorded and later transcribed verbatim.

Results

Results revealed that knowledge about emotional and social development had been emphasized by experts in all the disciplines. Importance of nutrition in growth and development, knowing when and where to seek professional help, knowledge of what is good health, and maintaining good health were also considered important for efficient mother-craft.

Bhattacharjee (1975).

Objectives

1. To know the opinions of experts from all over India from the fields of child development, education, nutrition, pediatrics, psychiatry, psychology, and social work, as to what knowledge the mother should have for the proper upbringing of children.
2. To classify each idea related to the issue in terms of its correctness.
3. To evaluate each idea in terms of essentiality of the knowledge for efficient mother-craft.

Method

Sample

The sample consisted of 123 experts from all over India, with a minimum of 15 experts in each field.

Tool

Since the sample was large and the information had to be collected from experts from all over India, the questionnaire method was considered most suitable. The information gathered in the previous studies (Khattar, 1974; Pandey, 1974) was converted into statements for the questionnaire to be rated on two separate three point rating scales. The categories were (a) correct, partially correct, incorrect, and (b) most essential, essential, and least essential.

Procedure

Addresses of the experts were collected from various sources like directories of that particular discipline, ' Who's who in India ', ' Universities Handbook ', and through personal contacts. The first batch of questionnaires along with a letter explaining the purpose of the study and a reply paid self-addressed envelop were posted to the experts. The first batch of reminders were sent after a months' interval and then the second reminder.

Results

The results revealed that experts emphasized knowledge regarding mother's personal health and hygiene during pregnancy and after child birth, feeding and nutrition, stimulation for growth, and the disciplinary techniques used by the mother.

Devi (1976), Mewar (1977).

Objectives

1. To identify the knowledge content of two groups of mothers, one group from Khatmandu, Nepal, and the other group from Baroda, Gujarat, for efficient mother-craft, in different areas of the child's development.
2. To identify differences, if any, in the knowledge content of mothers with different educational and socio-economic backgrounds.

Method

Sample

The sample of study 4 (Devi, 1976) consisted of 100 Nepalese mothers from Khatmandu, out of which 50 mothers were from an income group of Rs. 700 to Rs. 999 per month, with an educational qualification of S. S. C. and above, the other 50 mothers were from an income group of Rs. 1000 and above per month and were either graduates or post-graduates.

The sample of study 5 (Mewar, 1977) consisted of 90 mothers from Baroda, Gujarat, out of which 30 mothers were from an income group of upto Rs. 700 per month, with an educational level of 4th standard or below. Other 30 mothers came from an income group of Rs. 701 to Rs. 1200 with an educational level of 5th to 11th standard. The remaining 30 mothers came from an income group of Rs. 1201 and above and were either degree or diploma holders.

All the subjects had atleast two children and the youngest child was between the age range of five to seven years, preferably five years but not exceeding seven years of age.

Tool

The questionnaire used for obtaining data on mother's knowledge content in various areas of the child's development was formulated on the basis of the items rated as correct and essential by a majority of the experts who formed the sample of study 3 (Bhattacharjee, 1975).

Procedure

Two pilot studies were undertaken to test the applicability of the tool, and to know whether the subjects could follow the statements which were translated into nepali.

The questionnaires were distributed to the mothers with specific instructions to go through each statement carefully and mark (✓) on a 5 point rating scale in terms of degree of agreement with the correctness of the statements. Clarifications were made wherever it was necessary. The investigator sat with some of the mothers who were unable to read so as to read out the statements to them and to mark the responses.

Results

1. In both the groups of Nepalese and Baroda mothers it was found that mothers with a low education and economic level consistently needed more information related to efficient mother-craft.
2. The Nepalese mothers who came from a comparatively higher social class indicated a consistently higher level of knowledge related to all aspects of child rearing than did the Baroda mothers.

Dalaya, V. Socio-Cultural Practices and Beliefs of a Tribal Village in Gujarat. 1981.

Hakim, M. Practices and Services Related to Economic Aspects, Health, Dietary Patterns, and Family Planning in a Tribal Village of Gujarat. 1981.

The tribals in India constitute 7.8% of the total population. They are spread all over the country and are known by different names. These people are remote in habits, economically dependent on the other affluent communities, ignorant, socially disabled, and generally face a lot of degradation. The Government of India has classified them under the term "deprived classes" for their uplift and integration into the normal stream. The focus of the world in present times on uplift of the disadvantaged gives the tribals of India a rightful place in this lime-light. The study presented here aimed at exploring some of the socio-cultural practices and beliefs as well as services related to the areas of economy, health, nutrition, and family planning of the Bhils of Sampoi village, in Jhalod taluka of Panchmahals district in Gujarat.

Objectives

1. To collect information about the economic background and present conditions of the tribal village of Sampoi, Jhalod taluka.
2. To gain insight about their marriage and family relations, as well as religious, political, and educational background.
3. To study the religious beliefs and practices as well as educational and recreational functions prevalent in the village.
4. To study the health, dietary, and family planning practices prevalent in the village.
5. To survey the adequacies, efficiency, and utility of the government and non-government services for the village, and to formulate suggestions for improving the existing services in the village.

6. To formulate suggestions for the project undertaken by the Child Development Department, specially in terms of parent education programme for child care.

Method

Sample

The sample for both studies (Dalaya, 1981; Hakim, 1981) consisted of 31 children (16 males and 15 females) whose ages were below five years. Out of these, 22 children belonged to joint families whereas 9 belonged to nuclear families. The parents of the sampled children were 70 in number, 31 mothers and 29 fathers (one father having two wives).

Tool

An interview schedule was prepared and used as the main tool for data collection. Items included socio-cultural practices and beliefs in areas of marriage and family relations, religion, recreation, politics, education, economic aspects, health and medicine, dietary patterns, and family planning. Each area was further divided into 3 categories viz background information, beliefs and practices, and services and inputs. A pilot study was conducted to verify the feasibility of the tool.

Procedure

The interviews were conducted separately in each house using the questionnaire as a guideline. Since the questions were open-ended, a good deal of probing was necessary, and the responses were noted down on the spot. An observation schedule was used as a guide in noting-down related observations. Further information related to services was gathered by surveying the agencies and interviewing their personnel.

Results

1. *Marriage and Family Relations.* Ceremonies and customs of engagement and wedding are elaborate and most frequent source of recreation. Clan endogamy is considered incestuous. There is also a strict rule of territorial exogamy. Matches are usually sought through matchmakers. Little verbal interaction between husband and wife as well as parent and child exists, whereas between daughter-in-law and mother-in-law there is comparatively more verbal communication.

2. *Religion.* The tribals believe in "animism". This includes praying to natural objects, animal sacrifices as well as raising death memorials called "totems". They are also highly superstitious and there is a tendency to relate religion with health problems.

3. *Recreation.* Recreation is dependent on seasons. In the period of relaxed seasons, sleeping and chatting are a part of the daily routine for women,

whereas for men, taking 'mahuda' is the most frequent source of recreation in all seasons. Children spend their leisure time in playing 'kabaddi' or 'hops-cotch'. Occasions such as fairs and festivals are also a source of recreation. The recreational pattern is group-oriented and not family-oriented.

4. *Political System.* The tribals are not very politically conscious. In times of elections they vote for the person whom they are told to vote for by a particular leader of the village. The village itself has a Headman, a Deputy Sarpanch, Gram-Sevak, CHW, Talati, Bhagat, and Badwa, who are regularly consulted in cases of emergencies. The Headman of the village commands the greatest respect.

5. *Education.* The women are illiterate and a few men have attended school. Since agriculture is the major occupation, children are not encouraged to attend balwadis or schools.

6. *Economic Aspects.* All the members of the family contribute to earning. Most of the tribals occasionally migrate to cities to supplement their meagre and unsteady income from the land. Main item for expenditure is food, followed closely by intoxicants and clothes. Indebtedness is a way of life, the local money lender being preferred to the co-operative society. Debts are repaid in grain or cash.

7. *Health and Medicine.* Cleanliness is given the least importance with the result that disease is found prevalent, this being mainly infections of skin and eyes and fever. Housing conditions are poor. The witch-doctor is consulted in case of any sickness. No child is immunized. Sanitary and water facilities are scarce. There is no garbage collection and disposal facility.

8. *Diet Patterns.* Main items consumed are cereals and pulse with minimal amounts of vegetables, milk, fruits, or meat. Starvation is a frequent occurrence and children were found to be undernourished as were the pregnant and lactating women. Infants and pre-schoolers did not benefit from the SNP scheme.

9. *Family Planning.* Acceptance of family planning is low, the reasons being belief in large families, the desire for sons, and the fear of operation.

Kapadia, S. Towards an Ecological Understanding of the Child in his Community. 1980,

Misra, R. Understanding the Adolesent Girl in the Slum Community : an Ecological Perspective. 1981.

Saraswathi, T. S. Understanding the Child in his Community Setting : an Ecological Perspective.

Project Sponsored by Indian Council of Social Science Research. 1980-82.

A child in any setting is markedly influenced by its milieu. His behavioral opportunities and constraints come from the setting; and that which he can experience is markedly influenced by the setting he inhabits.

What kind of life does a child lead? What are his/her activities/interactions throughout the day? What is the socialization process preparing him/her for? Such questions can best be answered if we have an understanding regarding the various environmental variables that impinge upon him/her, influencing and shaping his/her life, i.e. the ecological contexts in which they live and grow. As Willems (1973) states, it is imperative for a research worker to study 'behavior-in context' which necessarily includes the cultural meaning of a particular behavior.

An ecological study is to a great extent naturalistic in its methodological orientation; it is non-laboratory, and largely non-experimental and generally utilizes the observational method of child study.

Objectives

The objectives of study 1 (Kapadia, 1980) were :

1. To obtain general information regarding the ecological context in which the children in an urban slum in Baroda grow.
2. To study the general pattern of activities and interactions of children in the community.
3. To obtain information from the mothers of children under study regarding their general orientation to children and their upbringing.
4. To develop a profile of a day in the life of the family in an urban slum community.
5. To develop a profile of a day in the life of the child in an urban slum community.

The objectives of study 2 (Misra, 1981) were :

1. To obtain general information regarding the ecological setting in which adolescent girls in an urban slum grow,
2. To study the general pattern of activities and interactions of the adolescent girls in the community.
3. To obtain general information regarding the family setting in which adolescent girls grow.
4. To obtain information regarding the adolescent girls' views towards self, role expectations, future hopes, aspirations, and plans.
5. To see if there are any differences in the above mentioned aspects (objectives 2 and 4) between the school going and non-school going girls.

6. To develop a profile of a ' day in the life of a family '.
7. To develop a profile of a young girl in the community.

Method

Sample

Study 1 (Kapadia, 1980)

Amarnagar, an urban slum community was selected as a setting for the study. Ten Hindu families with school age children formed the sample for study of the family setting. Of these ten families five school age boys and five school age girls and their mothers were selected for indepth study.

Study 2 (Misra, 1981)

Kamatipura, an urban slum community, formed the venue of the study. Ten Hindu families with adolescent girls formed the sample for information regarding the family setting. Ten adolescent girls (14 to 16 years), 3 school going and 7 non-school going, formed the sample of adolescent girls.

Tool

In both the studies, naturalistic observation and unstructured interviews were utilized to obtain data regarding the various components under study.

Procedure

Unstructured interview technique was utilized to obtain information regarding the community setting and the family set up.

Direct observation of a single, continuous day in each of the families was done in order to draw up a profile of ' a day in the life of the family '. A running record of all that the family members did throughout the day was kept. The record included information regarding the activities throughout the day, how the persons engaged themselves in the various activities, with whom, for what length of time and so on.

The same technique was utilized to develop a profile of ' a day in the life of the child ' and ' a day in the life of the adolescent girl. '

Results

Study 1 (Kapadia, 1980)

The ecological setting

1. Amarnagar is an organized slum of the upper strata of urban poor.

2. It has a well-defined physical boundary and most of the facilities are available nearby.

3. Majority of the residents are Hindus and speak the local Gujarati language.

4. The income range of majority of the residents is between Rs. 200-450 per month and the average family size is of 6 members.

The family set-up

1. Contrary to the naive belief that much disharmony could be expected in the slum families, a warm and nurturant atmosphere prevails in the typical Amarnagar household.

2. Children are highly valued in the community.

3. Parental hopes and aspirations for children are clear-cut and their expectations seem to evolve from these hopes and aspirations. Parents hope that the son studies well, gets a good job and serves his parents in old age; for the girls they aspire a good match for a good marriage and ultimately to build a happy and contented family life of her own.

4. Education is stressed as an all-important factor for securing a good job; however, parental child rearing techniques are often not in line with their expressed hopes and aspirations.

5. In Amarnagar households, the mother is the main disciplinarian and power assertion the predominant disciplinary technique.

6. Women are managers of the home front in the true sense ; they lead a hectic life looking after the house and the children.

7. The main aims of socialization are : keeping up the good name of the family, being obedient and respectful towards elders, and prescribing clear-cut roles and sanctions for boys and girls.

Life of the children

1. For children in Amarnagar, life appears to be casually patterned.

2. Play occupies the major proportion of the day's time for boys and girls alike.

3. Idling is also common, probably because of the lack of adequate and interesting activities.

4. Considerable time is spent out of doors, probably due to congested housing space and also lack of any stimulating activity in the house.

5. Adults directly feature very little in children's activities.

6. Rare outings into the city, occasional visits by relatives, periodic appearances of acrobats and the festivals are the major forms of recreation.

Study 2 (Misra, 1981)

The ecological setting

1. Kamatipura is an old slum and it comprises of over 200 families living in the huts and Municipal flats.

2. It is centrally located and most of the facilities are available closeby.

3. It has people from various religions and consists mainly of Hindus and Muslims.

4. The average income of the family is Rs. 300/- p.m. and the average family size is of 6 members.

The family set-up

1. ' A day in the life of a family ' reveals that there is always a lot of work for women to do at home.

2. Presence of an adolescent girl relieves the mother of a lot of tasks and responsibilities in the house.

3. Mothers expressed feelings of fatalism and yet hope for a better future.

4. The importance of education was acknowledged by mothers. However, they did not think it was necessary for girls.

5. Most of the socialization of both girls and boys is aimed towards upholding the family name. For girls, in particular, it is geared towards preparing them for their future roles as homemakers.

Life of the adolescent girl

1. The adolescent girl who attends school has very little time left for herself. She performs dual duties at home and at school.

2. Regarding the locus of activity, the verandah and the house are the major loci. For the non-school going girls kitchen is also a place wherein they spend a lot of time.

3. Mother, siblings, and friends are the people with whom the girls interact with most of the time.

4. The girls share a close bond with the mother; with friends and siblings the relationship is one of fun and frolic. With the father, the interaction is minimal.

5. The adolescent girls in their interviews revealed, like their mothers, a fatalistic attitude to life and future. Future for them was bound with marriage. They visualized the future as fraught with difficulties and troubles.

6. The self concept of the girls was more other-oriented than self-oriented. Their identification was more to the family and the community at large, and not as individuals.

4. APPENDICES

Appendix A. List of Publications based on reported researches.

Appendix B. List of Research studies included in Compendium Vol. 1

APPENDIX A

Some published articles/reports based on Researches presented in Compendium Vol. 1

Arora, C. and Dave, P. Factors affecting marital happiness-opinions of University students. *Indian Journal of Home Science*, 1981, 14 (1), 38-42.

Jain, S. and Dave, P. A comparative study of conjugal relationship in young, middle-aged and old couples. *Journal of Family Welfare*, 1982, (In press).

Phatak, P. Motor and mental development of Indian infants from 1 month to 25 months. *Journal of Gujarat Research Society*, 1964.

Phatak, P. Behaviour patterns of infants under testing. *Psychological Studies*, 1966, 10, 115-123.

Phatak, P. Mental growth of normal Indian children. *Archives of Child Health*. 1968, 10, 41-47.

Phatak, P. Motor and mental development of Indian babies from 1 month to 30 months. *Indian Pediatrics*, 1969, 6, 18-23.

Phatak, P. Motor growth patterns of Indian babies and some related factors. *Indian Pediatrics*, 1970, 7, 619-624

Phatak, P. Mental development patterns during infancy and some related factors. *Psychological Studies*, 1974, 19, 1-7.

Phatak, P. A pictorial monograph of motor and mental development of Indian babies from 1 to 30 months. Photographs of Baroda-norms based on about 4000 records of performance on BSID-Research Form 1961. Anand Agencies : Pune, 1977.

Phatak, P.; Gopalan, V. and Nareshkumar. Application of abridged Bayley Scales of Infant Development (B.S.I.D.) : Compilation and evaluation of the Scales. *Indian Pediatrics*, 1974, 11, 545-549.

Phatak, P.; Khatri, A ; Joshi, A.; Gandhi, B.; Saraswathi, T. S. and Desai, M. *Research in Child Development, Marriage and Family Relations done in Indian institutions of teaching and research.* University Press, M. S. University of Baroda, 1966.

Phatak, P. and Phatak, A. Application of Bayley Scales of Infant Development (B.S.I.D.) to neurological cases. *Indian Pediatrics*, 1973, 10, 147-154.

Phatak, P. and Phatak, A. Application of abridged Bayley Scales of Infant Development (B S.I.D.) II : Application to neurological cases. *Indian Pediatrics,* 1974, 11, 551-555.

Research Unit; Phatak, P. Heights and weights of babies in Baroda from 1 month to 30 months. *Pediatric Clinic of India,* 1968, 3, 137-142.

Saraswathi, T.S. On representation in short-term memory : A developmental study. *Indian Educational Review,* 1974, 9, 79-93.

Saraswathi, T.S. A short-term longitudinal study of the development of colour and form concepts in pre-school children. *Indian Journal of Phychology,* 1974, 49, 231-236.

Saraswathi, T.S. Production and mediation deficiency in children's free recall. *Indian Journal of Psychology,* 1974, 49, 298-304.

Saraswathi, T.S. Response bias and individual differences in children's memory performance. *Indian Journal of Psychology,* 1975, 50 299-306.

Saraswathi, T.S. Changes in immediate memory span : A longitudinal study of children from 3 to 5 years of age. *Indian Educational Review,* 1976, 11, 65-70.

Saraswathi, T.S. Production and mediation deficiency in children's free recall : A brief report. *Indian Educational Review,* 1977, 12, 61-67.

Saraswathi, T.S. Techniques for thes tudy of socialization : The need for a broader perspective. In D. Sinha (Ed). *Socialization of the Indian Child.* New Delhi : Concept Publishing Company, 1980.

Saraswathi, T.S. Saxena, K. and Sundaresan, J. Development of moral judgement in Indian children between ages 8 to 12 years. In Y.M. Poortinga (Ed.) *Basics problems in cross-cultural psychology.* Selected papers from the Third International Conference of the International Association for Cross-Cultural Psychology, Amsterdam, Swets and Zeitlinger, 1977.

Saraswathi, T.S. Sundaresan, J. and Saxena, K. Age, sex and social class differences in the development of moral judgement of Indian children between ages 10-15 years. Unpublished final report submitted to Indian Council for Social Science Research, 1977. (Mimeographed Copies for limited circulation).

Saraswathi, T. S. and Sundaresan, J. Perceived maternal disciplinary practices and their relation to development of moral judgement. Unpublished final report submitted to the Indian Council for Social Science Research, 1978. (Mimeographed copies for limited circulation.)

Saraswathi, T. S. and Sundaresan, J. Perceived parental disciplinary practices and their relations to development of moral judgement in Indian children ages 12-13 years. *Social Change,* 1979, 23-28.

Saraswathi, T. S. and Sundaresan, J. Perceived maternal disciplinary practices and their relation to development of moral judgement. *International Journal of Behavioural Development*, 1980, 3, 91-109.

Saraswathi, T. S. Sundaresan, J. and Saxena, K. Age, sex and social class differences in the development of moral judgement in Indian children between 10 to 15 years. In J. Antony (Ed). *The Child in the Family*, Vol. 6, Year book of the International Association for Child Psychiatry and Allied Professions, New York : John Wiley, 1980.

Saraswathi, T. S., Takkar, D. and Kaur, I. Perceived maternal disciplinary practices and their relation to development of moral judgement in Indian children ages 10-13 years. In L.H. Eckensberger; Y. Poortinga and W. J. Lonner (Eds.) *Cross Cultural Contributions to Psychology*. Lisse, Holland : Swets and Zeitlinger, 1979.

Sharma, P. ; Saraswathi, T. S. and Gir, S. Development of social competence : School's obligation to children and adolescents. *Quest in Education*, 1980, XVII (3), 217-227.

Sharma, P., Saraswathi, T. S. and Gir. S. Role of parents and teachers in promoting social competence. *Child Psychiatry Quarterly*, 1981, XIV (4), 134-137.

Sundaresan, J. and Saraswathi, T. S. Development of moral judgement : Its relevance to parents and teachers. *Social Welfare*, 1977, 24, 12-15.

Verma, A. and Phatak, P. Manual for using Bayley Scales of Infant Development (Research Form 1961) based on Baroda studies and Baroda norms. *Research Report No. 3*, Department of Child Development, M. S. University, Baroda, 1973. (Mimeographed copies for limited circulation).

Verma, A., Phatak, P., Gopalan, V. and Nareshkumar. Mental and motor growth patterns and growth velocity of Indian babies. *Research Report No. 4*, Department of Child Development, Faculty of Home Science, M. S. University, Baroda, 1973. (Mimeographed copies for limited circulation).

Verma, A. and Poffenberger, T. *Social change and perception of change in child rearing practices in a suburban Indian village*. Baroda : M. S. University of Baroda Press, 1970.

Verma, S. and Saraswathi, T. S. Social class differences in the development of moral judgement. *Indian Journal of Psychology*, 1976, 51, 325-332.

APPENDIX B

List of Research Studies Abstracted for Compendium Vol. 1

I. *Human Development*

A. Physical, Motor, and Mental Development

1. Gandhi, G. A study of birth weights and birth lengths of about 3000 neonates in a maternity home in Baroda (1952-'63). 1965.
2. Satyanandam, M. Heights and weights at birth of a sample of children born in Baroda city. 1976.
3. Derasari, A. J. A developmental study of anthropometric measurements during the first fifteen months of life. 1974.
4. Kaur, K. A developmental study of the relationship between stature and mental development in the period of infancy. 1977.
5. Dave, C. Motor and mental performance of babies under longitudinal study (1-15 months). 1969.
6. Phatak, P. Motor and mental growth of Indian babies (1-30 months). 1970.
7. Sharma, R. Malnutrition and mental development : A longitudinal study. 1979.
8. Sathe, V. Nutritional Status and mental performance of Baroda infants through the first year of life. 1980.
9. Bedi, N. Effects of malnutrition on intellectual and behavioral development through the first years of life. 1981.
10. Kothari, R. Effects of nutritional status on intellectual functioning and behavioral development of infants. 1981.

B. Cognition and Moral Development

11. Sawhney, K. A developmental study of the transition from a perceptual to a conceptual mode of cognitive functioning. 1973.
12. Saraswathi, T. S. Changes in immediate memory span : A longitudinal study of children from 3 to 5 years. 1973.
13. Saraswathi, T. S. Production and mediation deficiency in children's free-recall. 1974.
14. Saraswathi, T. S. On representation in short-term memory : A developmental study. 1974.

15. Saraswathi, T. S. A short-term longitudinal study of the development of color and form concepts in pre-school children. 1974.
16. Saxena, K. Development of moral judgement of children between ages 8-12 years. 1975.
17. Saraswathi, T. S., Sundaresan, J., Saxena, K. Age, sex, and social class differences in the development of moral judgement of Indian children between ages 10-15 years. 1977.
18. Verma, S. Social class differences in the development of moral judgement in girls of ages 10-12 years. 1976.
19. Saolapurkar, S. Sex differences in moral judgement of children from 10-12 years. 1976.
20. Saraswathi, T. S. and Sundaresan, J. Perceived maternal disciplinary practices and their relation to development of moral judgement. 1978.
21. Takkar, D. Boy's perception of maternal disciplinary practices and their relation to development of moral judgement in 10 to 13 years olds. 1977.
22. Kaur, I. Perceived maternal disciplinary practices and their relations to development of moral judgement in 10-15 year old girls in lower-middle social class. 1978.
23. Kapadia, R. Perceived maternal disciplinary practices and their relation to development of moral judgement in 10-15 year old boys in lower-middle class. 1978.
24. Bhatnagar, C. Perceived maternal disciplinary practices and their relationship to development of moral judgement in 10-13 year olds. 1978.
25. Saraswathi, T S , Sundaresan, J. A short-term longitudinal study of the development of moral judgement in Indian boys. 1979.

C. Socialization and Personality

(*i*) *Childhood*

26. Icchapunani, A. Measuring aggression in pre-school children and relating it to child rearing practices. 1966.
27. Vali, F. A comparative study of maternal responses towards dependent and aggressive behaviour of their 3-4 year old children as seen in two economic classes of two cultures. 1967.
28. Choksey, S. D. Determinants of aggression in pre-school children. 1963.
29. Bharadwaj N. A study of techniques of control and their relation to expression of aggression and dependency in a rural setting. 1969.
30. Parikh, N. Sex role preferences of pre-school children—An exploratory study. 1971.

31. Mebta, A. Sex role identification in pre-school children from three socio-economic classes. 1972.
32. Pandya, L. A study of the development of achievement motivation in young children. 1971.
33. Sharma, P., Saraswathi, T. S., Gir, S. Role of parents and teachers in promoting social competence.
34. Sharma, P., Saraswathi, T. S., Gir. S., Development of social competence: The schools' obligations to children and adolescents.
35. Gir, S. Development of competence, related personality characteristics, and coping strategies of competent boys. 1979.
36. Sharma, P. Development of competence, related personality characteristics, and coping strategies of competent girls. 1974.
37. Subramanium, C. A study of the personality characteristics of competent school children from middle and low socio-economic class. 1980.
38. Kurien, V. A developmental study of the social status of children from four to eight years of age. 1974.
39. Pathak, P. Behavior problems of normal school going boys of seven, eight, nine, and ten years of age as indicated by parents, boys, and teachers. 1973.

(ii) *Adolescence*

40. Revathi, K. Some college girls attitudes towards parental control. 1963.
41. Joshi, A. A study of attitudes towards self and their relationships with various background factors and academic achievement. 1964.
42. Mehta, R. A case study of pre-adolescents of 4 castes (Patidar, Baria, Bhil, Vankar) in a village. 1965.
43. Murti, P. K. A study of some of the factors related to adjustment problems of adolescent girls. 1969.
44. Bhatt, N. A study of factors related to social and personal adjustment problems of adolescent girls in Faculty of Home Science and preparatory unit of Arts. 1969.
45. Bakshi, P. A comparative study of the factors related to adjustment problems of a selected sample of adolescent boys and girls. 1969.
46. Gohain, A. A study of some of the factors affecting adjustment in adolescent girls with specific reference to self-concept. 1971.
47. Varadpande, N. A study of some of the factors affecting the self-concept of adolescent boys. 1971.

48. Kamat, K. A study of some factors affecting the self-concept of undergraduat students in the Faculty of Home Science. 1971.

D. Assessment Measures

49. Pathak, P. Abridged mental and motor scales of Bayley scales of infant development (Research form 1961). 1973.

50. Khokha, R. A study of substituting indigeneous materials for BSID materials for testing some selected items from abridged mental scales of BSID. 1974.

51. Maheshwari, S. Comparison of scores on BSID and two sets of substitute indigeneous material. 1979.

52. James, S. Application of the Phatak draw-a-man scale to the age group of two and a half years to six years and calculation of tentative norms. 1967.

53. Sase, A. Application of draw--aman test for children of three to six years attending school in Baroda city. 1969.

54. Sharma, V. Application of Phatak's draw-a-man test to age group 10 + onwards. 1970.

55. Jinsi, N. Application of Koppitz test to human figure drawings of Indian children. 1975.

56. Sundaresan, J. Adaptation of Kohlberg's moral judgement test for Indian children eight to twelve years of age. 1975.

II. *Marriage and Family Relations*

A. Preparation for Marriage, Mate Selection, and Engagement

57. Virk, S. Opinions of youth on the need for preparation for marriage. 1976.

58. Cherian, M. Attitudes towards dowary of college students representing Syrian christian denominations in Kerala state. 1963.

59. Medora, N. Opinions of youth regarding sex. 1975.

60. Raheja, S. Opinions of M. S. University students regarding the selection of marriage partner. 1978.

61. Sharma, A. Opinions of married couplies regarding the selection of marriage partner : A study of couples residing in Baroda. 1978.

62. Goel, U. Opinions of M. S. University students on engagement as prelude to marriage. · 1977.

B. Adjustment in Marriage and Family Relations

63. Mathew, A. Areas of marital adjustment for Indian women in the early years of married life. 1964.

64. Arora, G. Opinions of youth on factors affecting marital happiness. 1976.

65. Jain, S. A comparative study of conjugal relationship in young, middle-age and old couples. 1978.

66. Maragatham, M David, D. A study of family relationships of six families in a Jat village near Delhi. 1963.

68. Chawla, H. A study of family relationships of twent-nine baria families of Rajpur village in Gujarat with special reference to husband wife, parent-child relationships. 1967.

C. **Resource Materials Kit**

69. Khosla, E. Resource materials for the course on mirrage, 1979.

D. **Child-rearing Practices and Education for Mother-craft**

70. Verma, A. & Poffenberger, T. Social change and perception of change in an Indian village. 1970.

71. Arondekar, S. Case study of child rearing practices of ten families from higher and lower socio-economic groups. 1965.

72. Desai, M. A study of child-rearing practices with references to feeding and toilet training in higher and lower socio-economic groups. 1965.

73. Singh, A. A study of child rearing practices with special references to feeding and toilet-training in higher middle, lower-middle, and lower socio-economic groups. 1966.

74. Sethi, S. A study of child-rearing practices with special reference to feeding and toilet-training in two villages (one in Cujarat and one in Punjab). 1967.

75. Jawa, V. A study of the shifts in the mother's handling as the child grows from birth to five years. 1972.

76. Paliwal, N. A child's life at home from five to twenty-five months (longitudinal approach). 1971.

77. Gambir, S. The child's life at home from birth to five years with special reference to social interactions. 1972.

78. Pandey, M. Knowledge content of mothers for efficient mother-craft with special reference to soical and emotional development. 1974.

79. Khattar, M. Knowledge content of mothers for efficient mother-craft with special reference to physical, motor, and mental development. 1974.

80. Bhattacharjee, M. Knowledge content of mothers for efficlent mother craft (infants and pre-schoolers). 1975.

81. Mewar, J. Knowledge content of mothers from Baroda for efficient mother craft with reference to children upto five years. 1977.

82. Devi, N. A study of the knowledge content of Nepalese mothers of Khatmandu for efficient mother craft with reference to children upto five years. 1976.

E. **Understanding Children and Families in their Ecological Setting**

83. Dalaya, V. Socio-cultural practices and beliefs of a tribal village in Gujarat. 1981.

84. Hakim, M. Practices and services related to economic aspects, health, dietary patterns, and family planning in a tribal village of Gujarat. 1981.

85. Kapadia, S. Towards an ecological understanding of the child in his community. 1980.

86. Misra, R. Understanding the adolescent girl in the slum community: An ecological perspective. 1981.

87. Saraswathi, T. S. Understanding the child in his community setting: An ecological perspective. 1980-1982.

How does one acknowledge the contributions of so many to a volume of this nature? While the responsibility for its limitations undoubtedly rests with the senior editor, the credit rightfully goes to all the partners in this joint undertaking.

ERRATA

The following titles are missing, and need to be inserted in the pages indicated :

D. Some assessment measures (before Phatak, P.)	82
A. Preparation for marriage (before Virk, S.)	93
B. Adjustment in Marriage and family relations (before Mathew, A.)	110
C. Resource materials kit: Marriage and family studies (before Khosla, E.)	121
D. Child-rearing practices and education for mother-craft (before Verma, A. & Poffenberger, T. ,	112
E. Understanding children and families in their ecological setting (before Dalaya. V.)	139